						CT	ATEO	NE LITALI					FO	RM 3			
						EPARTMENT DIVISION O	OF NA					AME	NDED REPO	ORT 🗾			
		APP	LICATION F	OR	PERMI	T TO DRILL	-				1. WELL NAME and		ER 2-30G1BS				
2. TYPE (		RILL NEW WELL ((	REENTE	R P&/	A WELL (	C DEEDE	N WELL			3. FIELD OR WILDCAT NATURAL BUITTES							
4. TYPE C					,	ane Well: NO	.iv well	- 🔾			NATURAL BUTTES  5. UNIT or COMMUNITIZATION AGREEMENT NAME						
6. NAME	OF OPERATOR					NATURAL BUTTES 7. OPERATOR PHONE											
8. ADDRE	SS OF OPERA	TOR	HORE, L.P.				9. OPERATOR E-MA	.IL	29-6515								
	RAL LEASE N	UMBER	P.O. Box 1737	79, DE	11. MIN	NERAL OWNE					12. SURFACE OWN		@anadarko 	.com			
		UTU463	12 = 'foo'\		FEDERA	AL 📵 IND	IAN (	) STATE (	_) F	EE 🔵	FEDERAL INI	DIAN (	STATE	~	FEE ()		
		ACE OWNER (if b		`							16. SURFACE OWN		`				
15. ADDR	LESS OF SUKF	ACE OWNER (II D	00X 12 = 1ee	,	40 TNT	TEND TO COM	MING	E BROBUST	TON FE	2011	19. SLANT	EK E-1417	AIL (II DO)	12 – 1			
	AN ALLOTTEE 2 = 'INDIAN')	OR TRIBE NAME				TEND TO COM PLE FORMATI (Submit C	ONS	gling Applicat		ю 🔵		RECTION	IAL 📵	HORIZON	ITAL 🛑		
20. LOC	ATION OF WE	LL		FO	OTAGES	5	QT	r-QTR	SE	CTION	TOWNSHIP	R	ANGE	МЕ	RIDIAN		
LOCATIO	ON AT SURFA	CE	15	83 FN	IL 1247	7 FEL	:	SENE		30	9.0 S	2	2.0 E		S		
Top of U	ppermost Pro	ducing Zone	15	47 FN	IL 1679	) FEL	5	SWNE		30	9.0 S	2	22.0 E S		S		
At Total	Depth		15	47 FN	NL 1679 FEL		9	SWNE 30				22.0 E S					
21. COUN	ITY	UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 1547					23. NUMBER OF AC		<b>DRILLING</b> 51	UNIT				
					25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)  541  26. PROPOSED DEPTH MD: 9571 TVD: 9536						36						
27. ELEV	ATION - GROU	JND LEVEL 4941			28. BOND NUMBER  WYB000291					29. SOURCE OF DR WATER RIGHTS AP	PROVA		IF APP	LICABLE			
Chuin	Hala Cina	Cooling Sine	Lamath	\A/-:		ole, Casing,				ion	Comont		Carles	V: -1-1	Weight		
String	Hole Size	Casing Size 8.625	0 - 2570		ight 8.0	Grade & Th		Max Mu									
											Class G 270 1.15				15.8 15.8		
PROD	7.875	4.5	0 - 9571	1:	1.6	I-80 LT8	ъС	12.	.5	3 3			3.38	11.0			
											50/50 Poz		1270	1.31	14.3		
						A	ГТАСН	IMENTS									
	VERIFY T	HE FOLLOWIN	G ARE ATT	ACHI	ED IN A	ACCORDAN	CE WI	TH THE U	тан о	IL AND G	GAS CONSERVATI	ON GE	NERAL F	RULES			
<b>⊮</b> w	ELL PLAT OR	MAP PREPARED E	BY LICENSED	SUR	VEYOR (	OR ENGINEEI	R	сом	IPLETE	DRILLING	PLAN						
AF	FIDAVIT OF S	TATUS OF SURFA	ACE OWNER A	GRE	EMENT (	(IF FEE SURF	ACE)	FORM	и 5. IF	OPERATOI	R IS OTHER THAN T	HE LEAS	SE OWNER	Ł			
DRILLED		URVEY PLAN (IF	DIRECTIONA	LLY	OR HOR	ZIZONTALLY		<b>№</b> торо	OGRAPI	IICAL MAI	•						
NAME La	ura Abrams			TIT	<b>LE</b> Regu	ulatory Analyst	II			PHONE 7	20 929-6356						
SIGNAT	URE			DA.	<b>TE</b> 06/21	1/2011				EMAIL La	aura.Abrams@anadarl	co.com					
	iber assign )4751702(			АРІ	PROVAL					Perm	O CHILD						

NBU 922-30H PAD

Drilling Program

1 of 7

### Kerr-McGee Oil & Gas Onshore. L.P.

### NBU 922-30G1BS

Surface: 1583 FNL / 1247 FEL SENE BHL: 1547 FNL / 1679 FEL SWNE

Section 30 T9S R22E

Unitah County, Utah Mineral Lease: UTU 0463

### **ONSHORE ORDER NO. 1**

### **DRILLING PROGRAM**

# Estimated Tops of Important Geologic Markers: Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1422	
Birds Nest	1753	Water
Mahogany	2124	Water
Wasatch	4705	Gas
Mesaverde	7309	Gas
MVU2	8285	Gas
MVL1	8730	Gas
TVD	9536	
TD	9571	

### 3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program

### 4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

### 5. <u>Drilling Fluids Program:</u>

Please refer to the attached Drilling Program

### 6. <u>Evaluation Program</u>:

Please refer to the attached Drilling Program

NBU 922-30H PAD Drilling Program 2 of 7

### 7. <u>Abnormal Conditions</u>:

Maximum anticipated bottom hole pressure calculated at 9536' TVD, approximately equals 6,090 psi (0.64 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,992 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

### 8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

### 9. <u>Variances:</u>

Please refer to the attached Drilling Program. Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- · Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

### Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

NBU 922-30H PAD Drilling Program
3 of 7

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

### Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

### Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

### Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

NBU 922-30H PAD Drilling Program
4 of 7

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

### Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

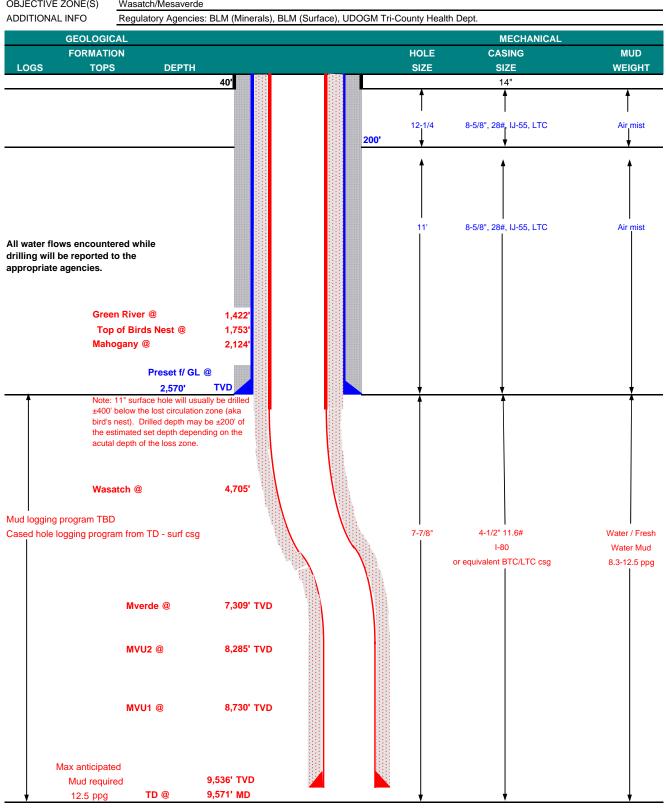
### 10. Other Information:

Please refer to the attached Drilling Program.



# KERR-McGEE OIL & GAS ONSHORE LP <u>DRILLING PROGRAM</u>

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE June 21, 2011 NBU 922-30G1BS WELL NAME TD 9,536' 9,571' MD TVD FINISHED ELEVATION **FIELD** Natural Buttes **COUNTY Uintah** STATE Utah 4,941' SURFACE LOCATION SENE 1583 FNL 1247 FEL Sec 30 T 9S R 22E Latitude: 40.009928 Longitude: -109.477745 NAD 83 BTM HOLE LOCATION **SWNE** 1547 FNL 1679 FEL Sec 30 T 9S R 22E Latitude: 40.010029 -109.479286 NAD 83 Longitude: OBJECTIVE ZONE(S) Wasatch/Mesaverde





### **KERR-McGEE OIL & GAS ONSHORE LP**

**DRILLING PROGRAM** 

CASING PROGRAM	<u>//</u>								DESIGN	FACTORS	
										LTC	BTC
	SIZE	INT	ERVAI	_	WT.	GR.	CPLG.	BURST	COLLA	PSE	TENSION
CONDUCTOR	14"	(	0-40'								
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,570	28.00	IJ-55	LTC	2.10	1.56	5.52	N/A
								7,780	6,350	279,000	367,000
PRODUCTION	4-1/2"	0	to	9,571	11.60	I-80	LTC/BTC	1.11	1.02	3.11	4.09

**Surface Casing:** 

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

### **CEMENT PROGRAM**

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGH <sup>*</sup>	Γ	YIELD
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15
Option 1		+ 0.25 pps flocele					
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15
		+ 2% CaCl + 0.25 pps flocele					
SURFACE		NOTE: If well will circulate water	to surface, o	option 2 will	be utilized		
Option 2 LEAD	2,070'	65/35 Poz + 6% Gel + 10 pps gilsonite	190	35%	11.00		3.82
		+ 0.25 pps Flocele + 3% salt BWOW					
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15
		+ 0.25 pps flocele					
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15
PRODUCTION LEAD	4,201'	Premium Lite II +0.25 pps	310	20%	11.00		3.38
		celloflake + 5 pps gilsonite + 10% gel					
		+ 0.5% extender					
TAIL	5,370'	50/50 Poz/G + 10% salt + 2% gel	1,270	35%	14.30		1.31
		+ 0.1% R-3					

<sup>\*</sup>Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

### **FLOAT EQUIPMENT & CENTRALIZERS**

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

### ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

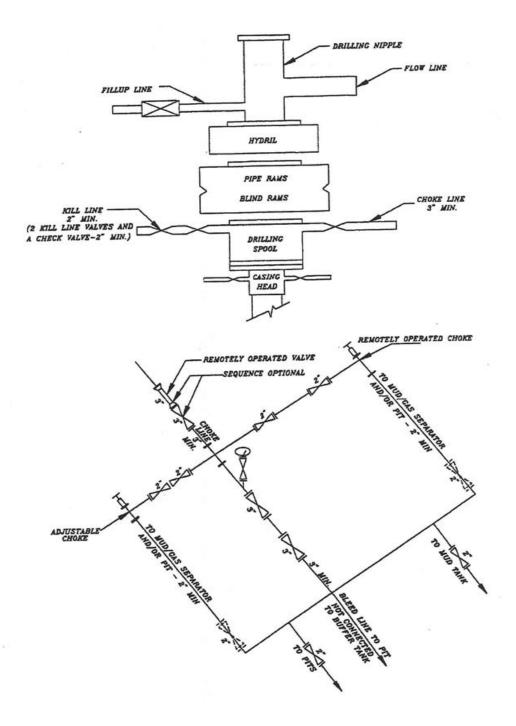
BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

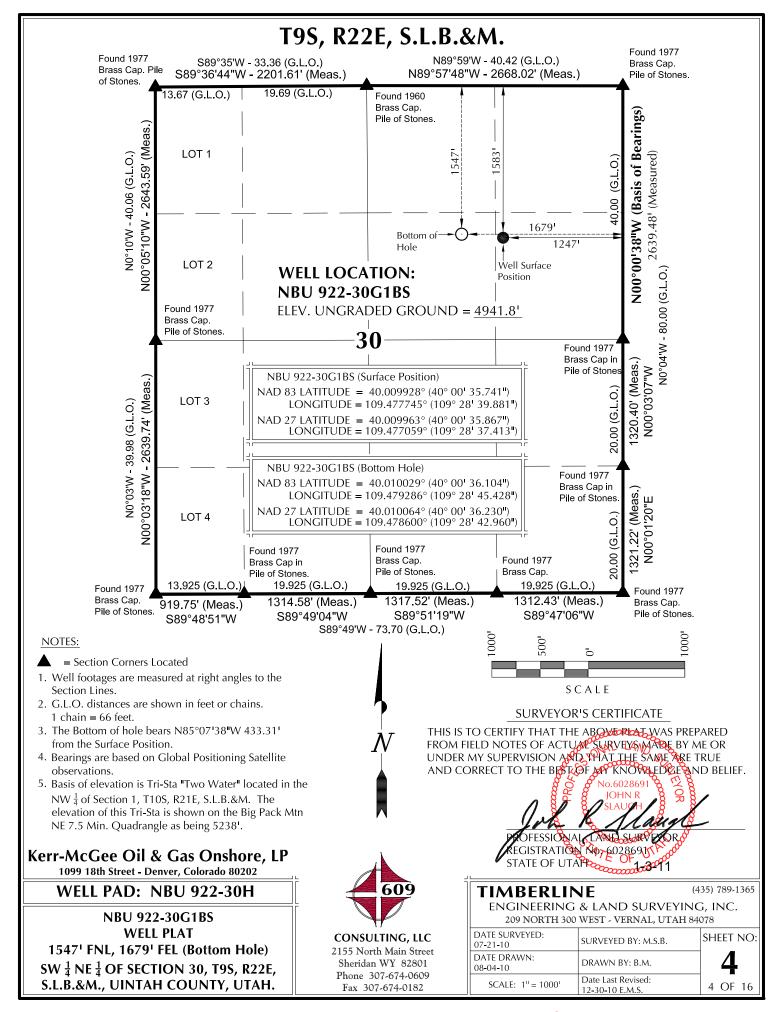
Surveys will be taken at 1,000' minimum intervals.	
Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.	

	Wood ngo nave i vi eyotem ie	Third monitoring. If no tive to available, violati monitoring will be attri	200.	
DRILLING	ENGINEER:		DATE:	
		Nick Spence / Danny Showers		
DRILLING	SUPERINTENDENT:		DATE:	
		Kenny Gathings / Lovel Young		

<sup>\*</sup>Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

EXHIBIT A NBU 922-30G1BS





			URFACE POSITIO		BOTTOM HOLE NAD83 NAD27							
WELL NAME	NAI LATITUDE	D83 LONGITUDE	NAI LATITUDE	LONGITUDE	FOOTAGES	LATITUDE	LONGITUDE	LATITUDE	FOOTAGES			
NBU -	40°00'35.930"	109°28'39.586		109°28'37.118"	1564' FNL	40°00'35.743"	109°28'31.719"		<b>LONGITUDE</b> 09°28'29.251"	1583 FNL		
	40.009980°	109.477663°	40.010015°	109.476977°	1224' FEL	40.009929°	109.475478°		09.474792°	612' FEL		
	40°00'35.867" 40.009963°	109°28'39.683 109.477690°	3" 40°00'35.993" 40.009998°	109°28'37.215" 109.477004°	1571' FNL 1232' FEL	40°00'31.594" 40.008776°	109°28'32.655" 109.475738°		09°28'30.188" 09.475052°	2003 FNL 685 FEL		
	40°00'35.803"	109°28'39.783		109°28'37.315"	1577' FNL	40°00'27.978"			09°28'30.674"	2369' FNL		
	40.009945°	109.477718°	40.009980°	109.477032°	1240' FEL	40.007772°	109.475873°		09.475187°	723' FEL		
	40°00'35.741" 40.009928°	109°28'39.881  109.477745°	40°00'35.867" 40.009963°	109°28'37.413" 109.477059°	1583' FNL 1247' FEL	40°00'36.104" 40.010029°	109°28'45.428" 109.479286°		109°28'42.960" 109.478600°	1547' FNL 1679' FEL		
		109°28'38.359		109°28'35.891"	1532' FNL		-					
	40.010070°	109.477322°	40.010105°	109.476636° COORDINATES -	1129' FEL	Position to Bott	tom Hole					
WELL NAME	NORTH	EAST W		ORTH EAS		NAME NOR		WELL NAME	NORTH	EAST		
NBU	-19.0'	- b123	BU	132.6' 546.	91 NBU	-792	2.1' 516.8'	NBU	36.81	-431.71		
922-30H2AS		92	2-30H3AS		922-30	OH3DS		922-30G1BS				
Kerr-McC	Gee Oil &	o Bottom F	THE NE \$\frac{1}{4} OI S.L.B.&M. W. GLOBAL PO OBSERVATION OBSERVAT	SARINGS IS THE SECTION 30, HICH IS TAKE ISITIONING SAONS TO BEAR	T9S, R22E, N FROM TELLITE N00°00'38"	W 150 1500 ? A 1.50 ? A 1.50 ? A 1.50 ?	sz=91.77806 13'19"E - 61 5 Bottom Ho	2.59'				
		nver, Colorado				J L						
		1011000	-30H	-	609	T	IMBERL	INE	(4:	35) 789-1365		
1099 18	L PAD - N	NBU 922.		_		- 11	engineerin			33) 109-1303		
1099 18	L PAD - N	NBO 922.				- 11				inc.		
WELL F	PAD INTE	RFERENCI					209 NORTH	300 WEST - VERI		5, INC. 078		
WELL F WELLS - NB	PAD INTE 8U 922-30H	RFERENCI 2AS, NBU 9	22-30H3AS,		ULTING, LL	C DAT			NAL, UTAH 840	5, INC. 078		
WELL F WELLS - NB NBU 922	PAD INTE SU 922-30H 2-30H3DS &	RFERENCI 2AS, NBU 9 & NBU 922-	22-30H3AS, 30G1BS	2155 No	orth Main Stre	C DAT 07-2 DAT	209 NORTH 3 E SURVEYED: 11-10 E DRAWN:	SURVEYED BY	NAL, UTAH 844 ': M.S.B.	5, INC. 078		
WELL F WELLS - NB NBU 922 LOCATE	PAD INTE SU 922-30H 2-30H3DS & ED IN SECT	RFERENCI 2AS, NBU 9	22-30H3AS, 30G1BS 5, R22E,	2155 No Sherida		C DAT 07-2 DAT 08-0	209 NORTH 3 E SURVEYED: 11-10	BOO WEST - VERI	NAL, UTAH 840 ': M.S.B. B.M.	i, INC.		

FILL SLOPES = 1.5:1**TOTAL WELL PAD AREA = 2.83 ACRES TOTAL DISTURBANCE AREA = 3.84 ACRES SHRINKAGE FACTOR = 1.10 SWELL FACTOR = 1.00** 

Kerr-McGee Oil & Gas Onshore, LP

1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 922-30H

**WELL PAD - LOCATION LAYOUT** NBU 922-30H2AS, NBU 922-30H3AS, NBU 922-30H3DS & NBU 922-30G1BS LOCATED IN SECTION 30, T9S, R22E, S.L.B.&M., UINTAH COUNTY, UTAH

TOTAL FILL FOR WELL PAD = 8,062 C.Y. TOPSOIL @ 6" DEPTH = 1,619 C.Y. EXCESS MATERIAL = 6,565 C.Y.

## **RESERVE PIT QUANTITIES**

CONSULTING, LLC

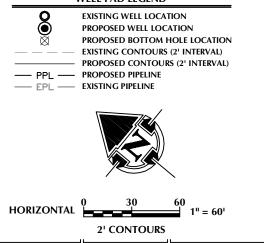
2155 North Main Street

Sheridan, WY 82801

Phone 307-674-0609 Fax 307-674-0182

**TOTAL CUT FOR RESERVE PIT** +/- 7,260 CY RESERVE PIT CAPACITY (2' OF FREEBOARD) +/- 27,390 BARRELS

(435) 789-1365 **TIMBERLINE** ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078



TAR 5/13/11

1/14/11 | SHEET NO:

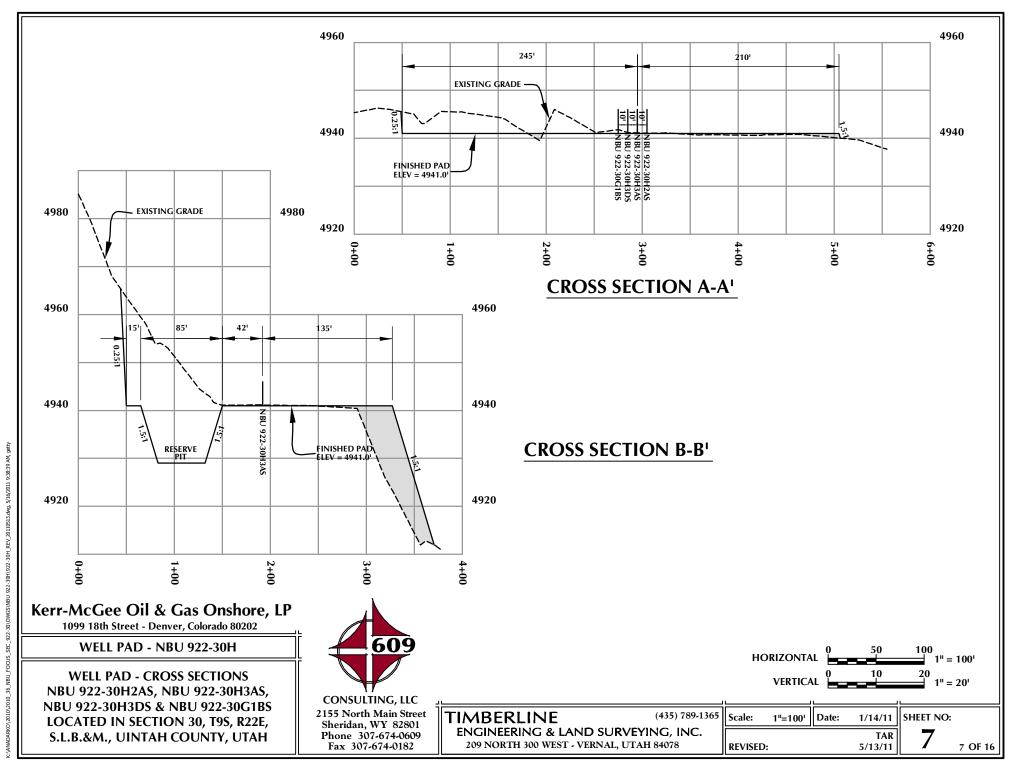
6

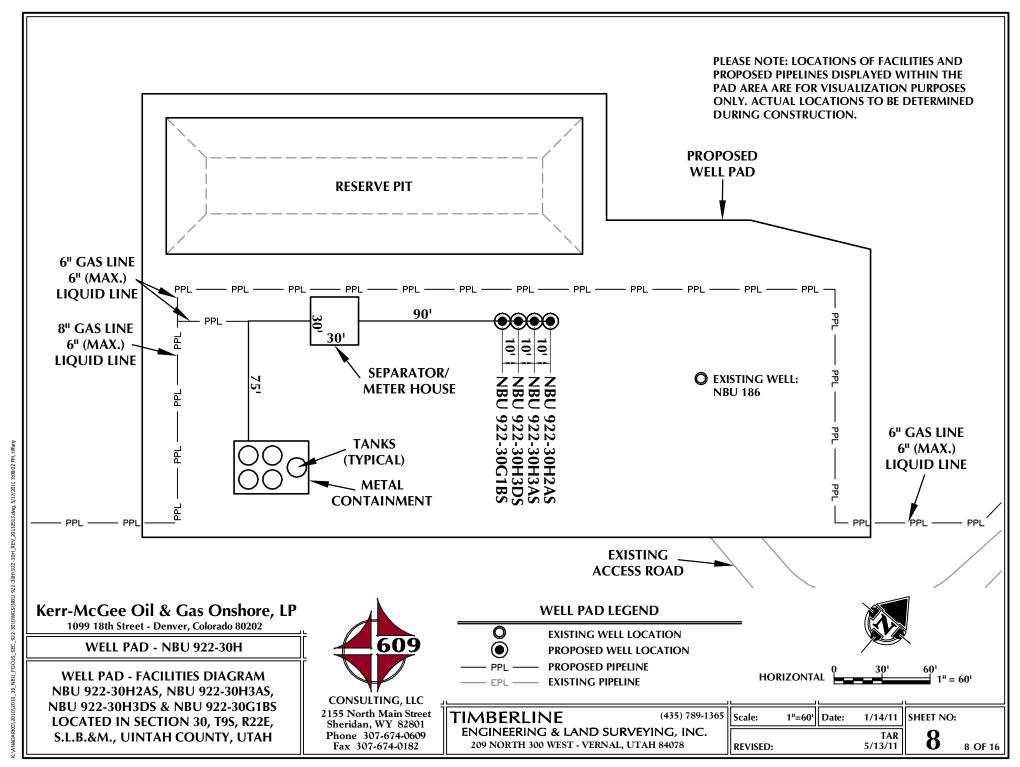
6 OF 16

1"=60' Date:

**REVISED:** 

RECEIVED: June 21, 2011





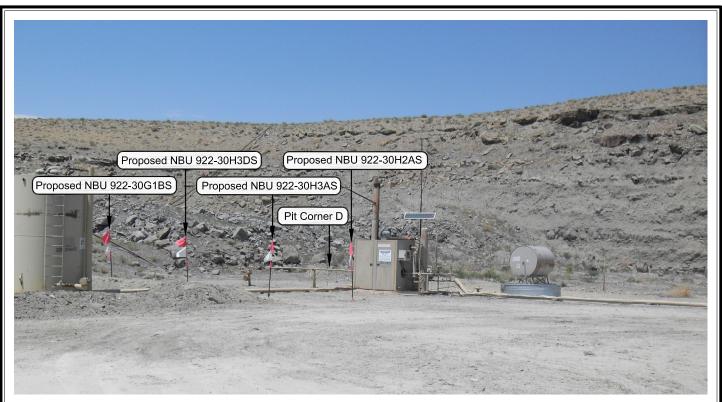


PHOTO VIEW: FROM LOCATION STAKE TO PIT CORNER D

**CAMERA ANGLE: NORTHWESTERLY** 

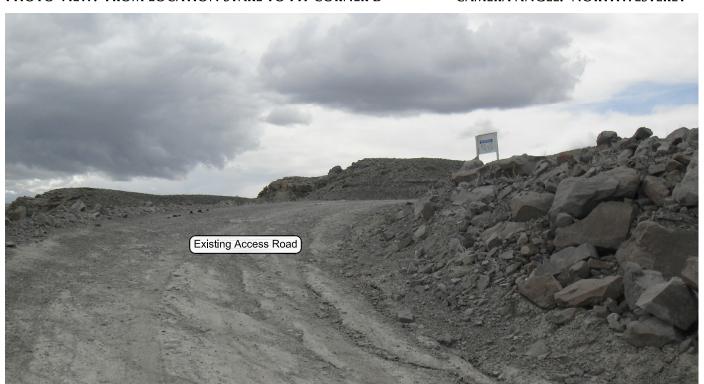


PHOTO VIEW: FROM EXISTING ROAD

**CAMERA ANGLE: SOUTHWESTERLY** 

Kerr-McGee Oil & Gas Onshore, LP

### WELL PAD - NBU 922-30H

LOCATION PHOTOS
NBU 922-30H2AS, NBU 922-30H3AS,
NBU 922-30H3DS & NBU 922-30G1BS
LOCATED IN SECTION 30, T9S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC 2155 North Main Street Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

### **TIMBERLINE**

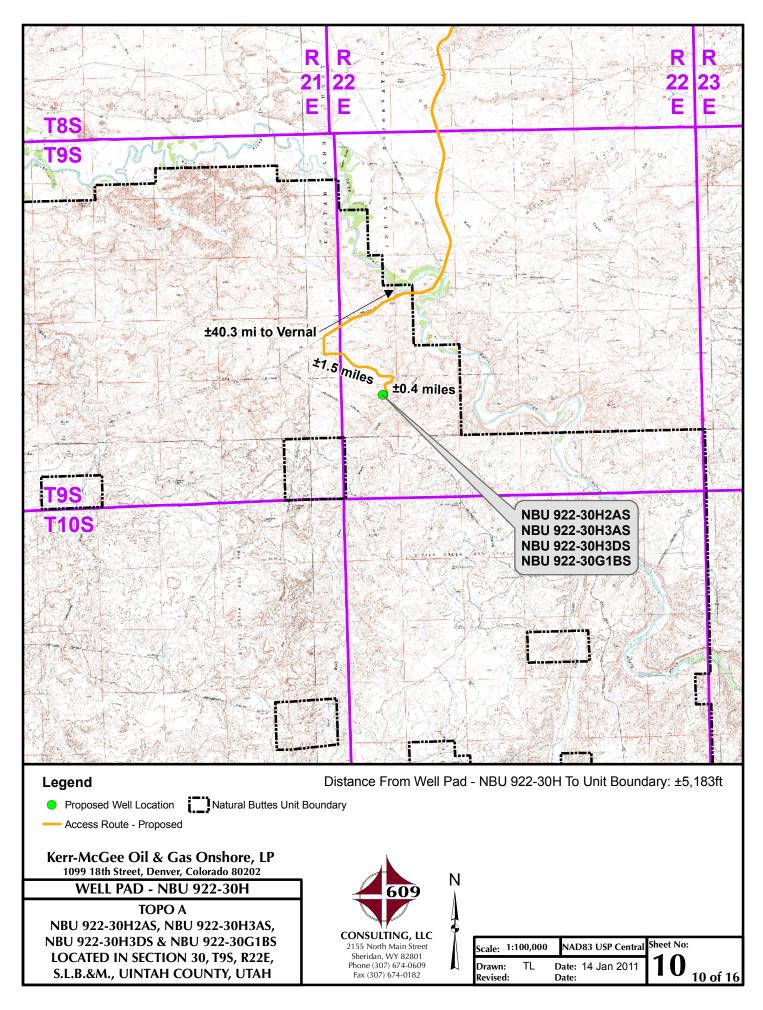
(435) 789-1365

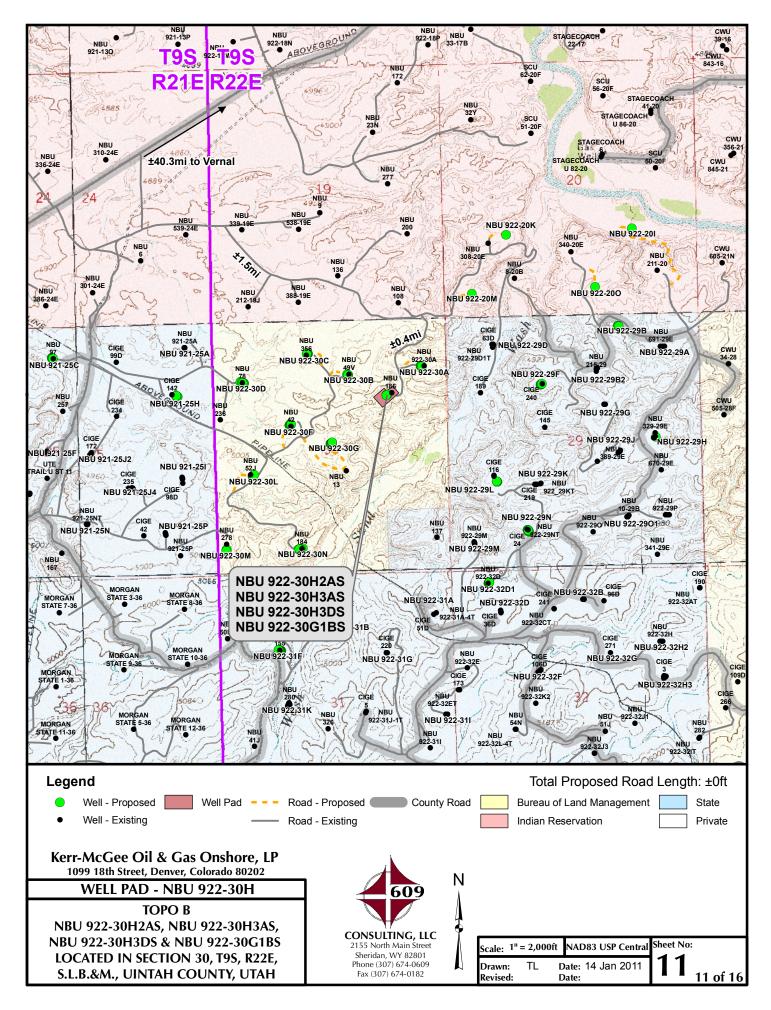
SHEET NO:

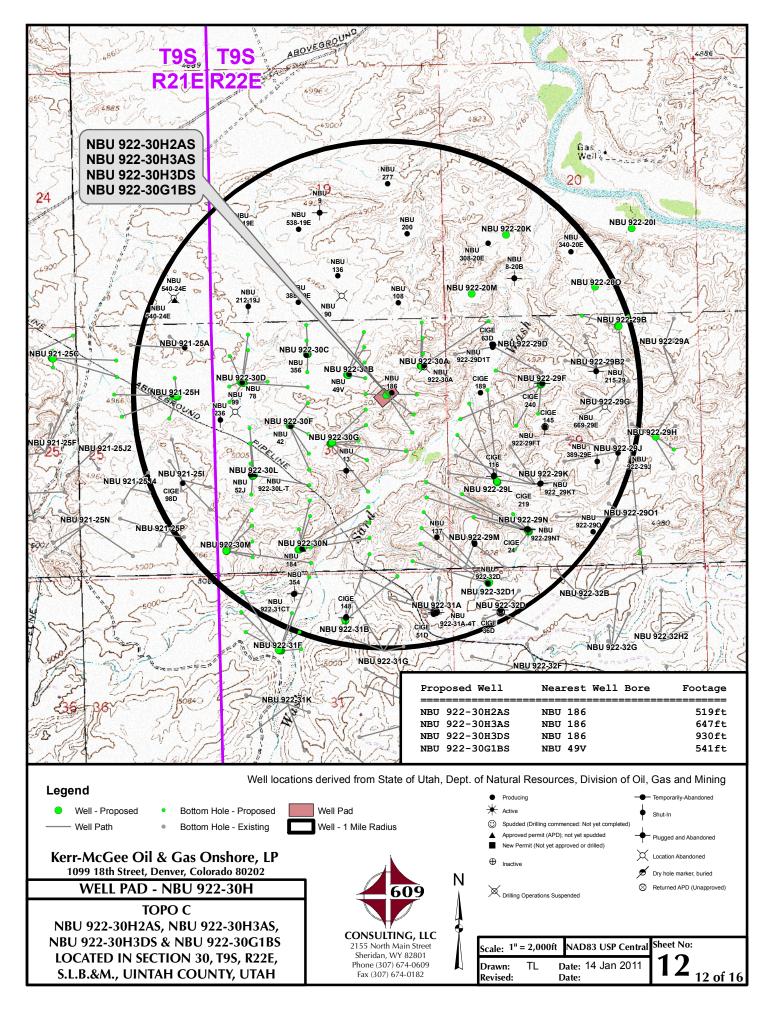
9 OF 16

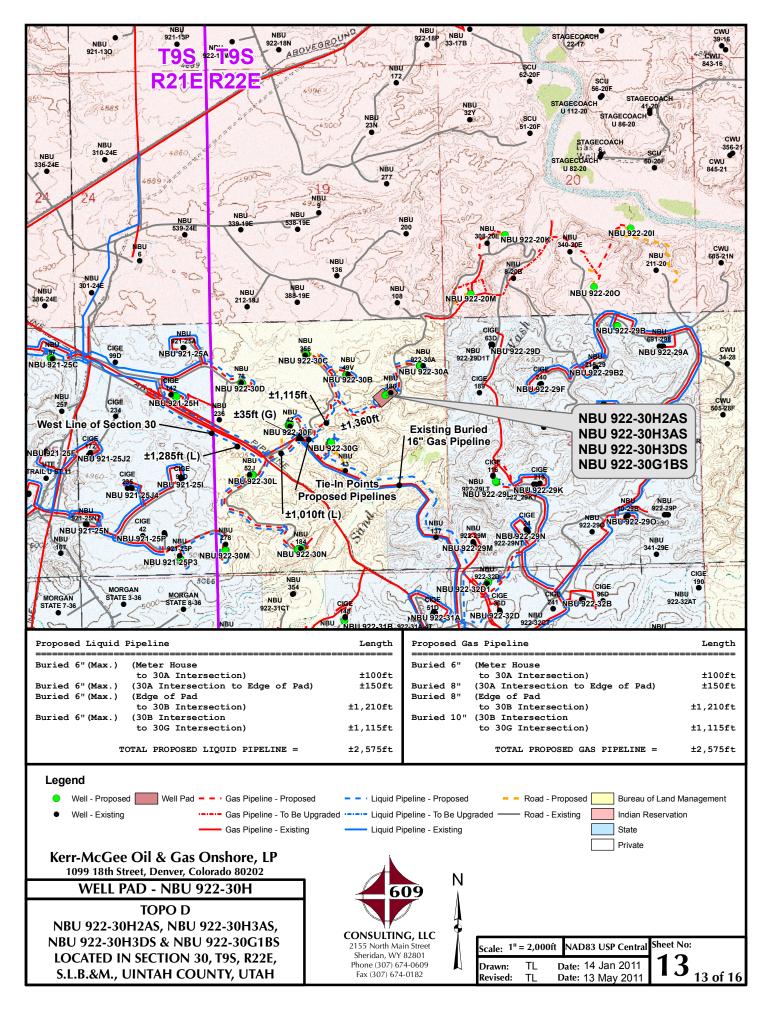
ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078

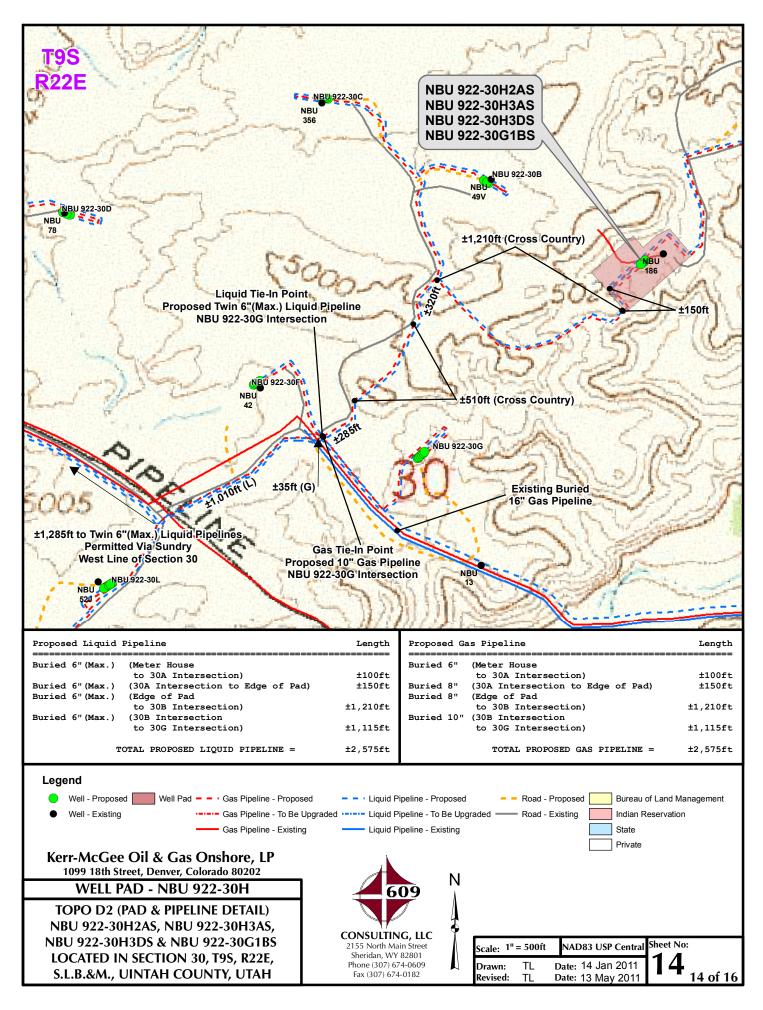
07-21-10	PHOTOS TAKEN BY: M.S.B.
DATE DRAWN: 08-04-10	DRAWN BY: B.M.
Date Last Revised: 12-30-10	D E.M.S.

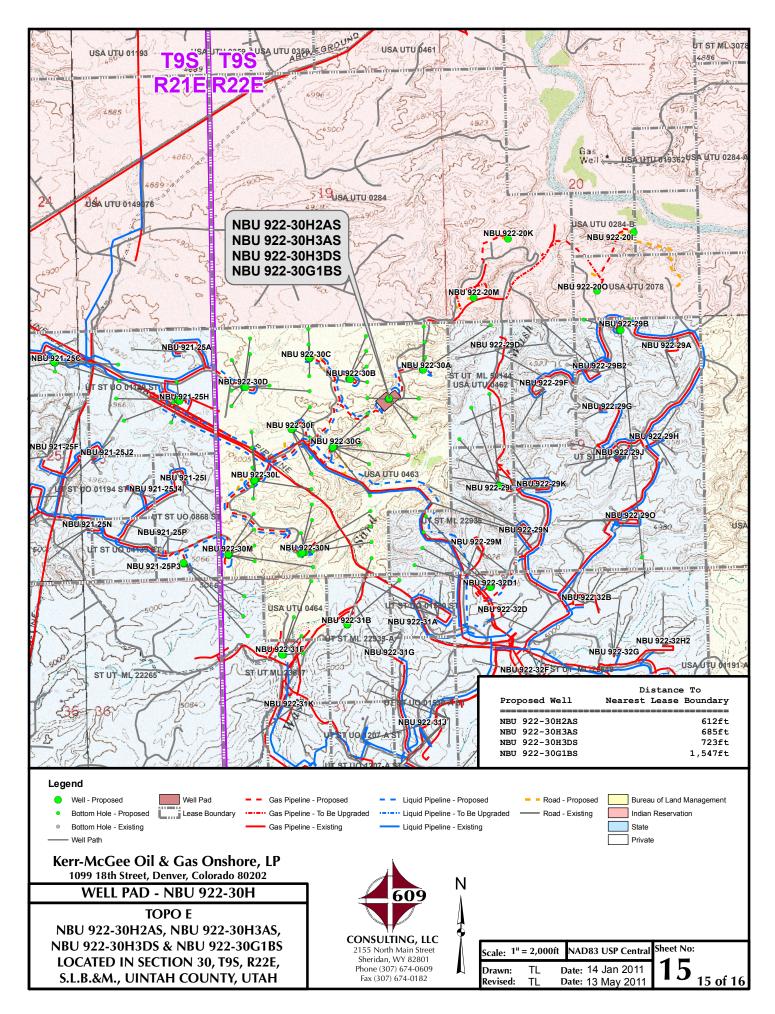












## Kerr-McGee Oil & Gas Onshore, LP WELL PAD – NBU 922-30H WELLS – NBU 922-30H2AS, NBU 922-30H3AS, NBU 922-30H3DS & NBU 922-30G1BS Section 30, T9S, R22E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 16.8 miles to a service road to the south. Exit left and proceed in a southerly, then easterly, then southeasterly direction along the service road approximately 1.5 miles to a second service road to the south. Exit right and proceed in a southerly direction along the second service road approximately 0.4 miles to the proposed well pad.

Total distance from Vernal, Utah to the proposed well location is approximately 42.2 miles in a southerly direction.

SHEET 16 OF 16



3315.38

9571.38

0.00

0.00

0.00 3280.00

0.00 9536.00

Site: NBU 922-30H PAD Well: NBU 922-30G1BS

Wellbore: OH

Design: PLAN #1 PRELIMINARY



WELL DETAILS: NBU 922-30G1BS GL 4941' & RKB 9' @ 4950.00ft (ASSUMED) +N/-S +E/-W **Northing Easting** Longitude Latittude 0.00 0.00 14533316.60 2066875.77 40° 0' 35.867 N 109° 28' 37.412 W **DESIGN TARGET DETAILS** Name TVD +N/-S +E/-W Northing Latitude Longitude Easting Shape 109° 28' 42.960 WCircle (Radius: 25.00 **PBHL** 9536.00 36.79 -431.60 14533346.01 2066443.60 40° 0' 36.230 N - plan hits target center FORMATION TOP DETAILS **CASING DETAILS TVDPath MDPath Formation** TVD MD Name Size 1422.00 1434.31 **GREEN RIVER** 2574.00 2604.33 8 5/8" 8.625 4705.00 4740.38 **WASATCH** 7344.38 **MESAVERDE** 7309.00 **SECTION DETAILS VSect** MD Inc Azi TVD +N/-S +E/-W Dleg TFace 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 300.00 0.00 0.00 300.00 0.00 0.00 0.00 0.00 0.00 -43.97 803.50 10.07 274.87 800.91 3.75 2.00 274.87 44.13 2739.95 10.07 274.87 2707.53 32.51 -381.34 0.00 0.00 382.72

PROJECT DETAILS: Uintah County, UT UTM12

-431.60

-431.60

1.75 180.00

0.00

0.00

433.16

433.16

Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 - Western US

36.79

36.79

Ellipsoid: Clarke 1866

Zone: Zone 12N (114 W to 108 W)

Location: SECTION 30 T9S R22E

System Datum: Mean Sea Level

**PBHL NBU 922-30G1BS** 

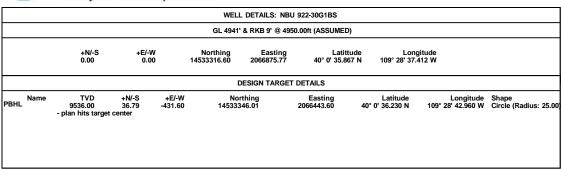
API Well Number: 43047517020000ject: Uintah County, UT UTM12 Scientific Drilling Rocky Mountain Operations

Site: NBU 922-30H PAD Well: NBU 922-30G1BS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

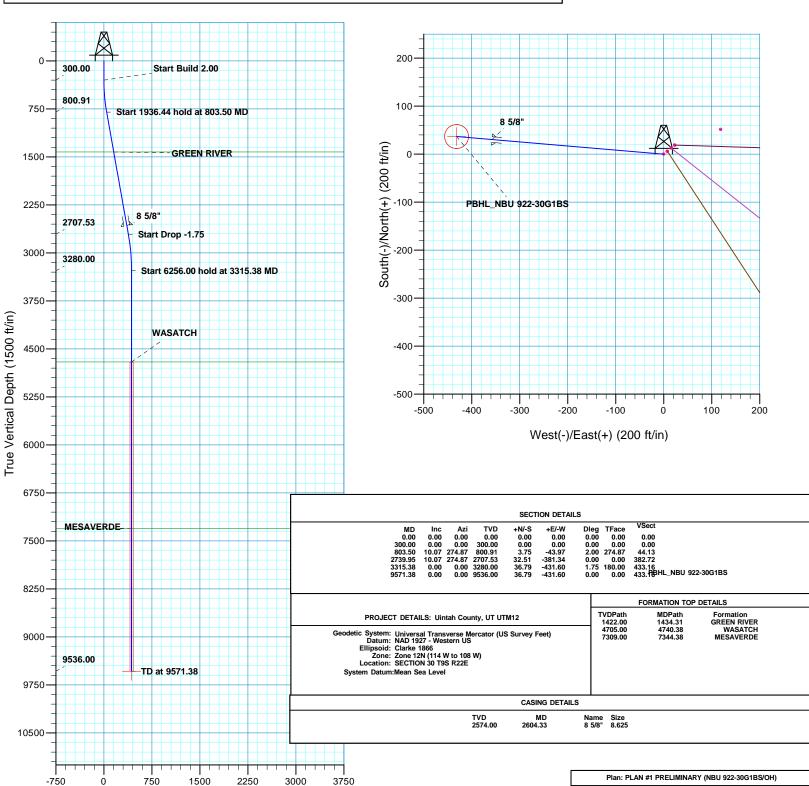




Vertical Section at 274.87° (1500 ft/in)

Azimuths to True North Magnetic North: 11.07 Magnetic Field Strength: 52340.1snT Dip Angle: 65.88° Date: 06/07/2011 Model: IGRF2010

Created By: RobertScott Date: 13:24, June 09 2011





# **Kerr McGee Oil and Gas Onshore LP**

Uintah County, UT UTM12 NBU 922-30H PAD NBU 922-30G1BS

ОН

Plan: PLAN #1 PRELIMINARY

## **Standard Planning Report**

09 June, 2011



RECEIVED: June 21, 2011



# **SDI**Planning Report



Database: EDM5000-RobertS-Local

Company: Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12
Site: NBU 922-30H PAD

Well: NBU 922-30G1BS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well NBU 922-30G1BS

GL 4941' & RKB 9' @ 4950.00ft (ASSUMED) GL 4941' & RKB 9' @ 4950.00ft (ASSUMED)

True

Minimum Curvature

Project Uintah County, UT UTM12

Map System: Universal Transverse Mercator (US Survey Feet)

 Geo Datum:
 NAD 1927 - Western US

 Map Zone:
 Zone 12N (114 W to 108 W)

System Datum: Mean Sea Level

Site NBU 922-30H PAD, SECTION 30 T9S R22E

Northing: 14,533,335.94 usft Site Position: Latitude: 40° 0' 36.054 N From: Lat/Long Easting: 2,066,898.40 usft Longitude: 109° 28' 37.117 W **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** 0.98 13.200 in

Well NBU 922-30G1BS, 1583 FNL 1247 FEL

 Well Position
 +N/-S
 -18.94 ft
 Northing:
 14,533,316.61 usft
 Latitude:
 40° 0' 35.867 N

 +E/-W
 -22.97 ft
 Easting:
 2,066,875.76 usft
 Longitude:
 109° 28' 37.412 W

Position Uncertainty 0.00 ft Wellhead Elevation: Ground Level: 4,941.00 ft

Wellbore ОН Magnetics **Model Name** Sample Date Declination **Dip Angle** Field Strength (nT) (°) (°) IGRF2010 06/07/2011 11.07 65.88 52.340

PLAN #1 PRELIMINARY Design **Audit Notes:** Version: Phase: PLAN Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 274.87

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
803.50	10.07	274.87	800.91	3.75	-43.97	2.00	2.00	0.00	274.87	
2,739.95	10.07	274.87	2,707.53	32.51	-381.34	0.00	0.00	0.00	0.00	
3,315.38	0.00	0.00	3,280.00	36.79	-431.60	1.75	-1.75	0.00	180.00	
9,571.38	0.00	0.00	9,536.00	36.79	-431.60	0.00	0.00	0.00	0.00 F	PBHL_NBU 922-30G



## SDI Planning Report



EDM5000-RobertS-Local Database:

Kerr McGee Oil and Gas Onshore LP

Company: Project: Uintah County, UT UTM12 NBU 922-30H PAD Site:

Well: NBU 922-30G1BS

Wellbore: ОН

Design: PLAN #1 PRELIMINARY Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well NBU 922-30G1BS

GL 4941' & RKB 9' @ 4950.00ft (ASSUMED) GL 4941' & RKB 9' @ 4950.00ft (ASSUMED)

True

Minimum Curvature

ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00 100.00 200.00 300.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 100.00 200.00 300.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
Start Build 400.00	<b>2.00</b> 2.00	274.87	399.98	0.15	-1.74	1.75	2.00	2.00	0.00
500.00 600.00 700.00 800.00 803.50	4.00 6.00 8.00 10.00 10.07	274.87 274.87 274.87 274.87 274.87	499.84 599.45 698.70 797.47 800.91	0.59 1.33 2.37 3.70 3.75	-6.95 -15.64 -27.78 -43.37 -43.97	6.98 15.69 27.88 43.52 44.13	2.00 2.00 2.00 2.00 2.00 2.00	2.00 2.00 2.00 2.00 2.00 2.00	0.00 0.00 0.00 0.00 0.00
Start 1936.4	44 hold at 803.50	MD							
900.00 1,000.00 1,100.00 1,200.00 1,300.00 1,400.00 1,434.31	10.07 10.07 10.07 10.07 10.07 10.07	274.87 274.87 274.87 274.87 274.87 274.87 274.87	895.93 994.38 1,092.84 1,191.30 1,289.76 1,388.22 1,422.00	5.18 6.67 8.15 9.64 11.12 12.61 13.12	-60.79 -78.21 -95.63 -113.05 -130.47 -147.90 -153.87	61.01 78.49 95.98 113.46 130.95 148.43 154.43	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
GREEN RIV			.,						
1,500.00 1,600.00 1,700.00	10.07 10.07 10.07	274.87 274.87 274.87	1,486.68 1,585.14 1,683.60	14.09 15.58 17.06	-165.32 -182.74 -200.16	165.92 183.40 200.89	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
1,800.00 1,900.00 2,000.00 2,100.00 2,200.00	10.07 10.07 10.07 10.07 10.07	274.87 274.87 274.87 274.87 274.87	1,782.06 1,880.52 1,978.98 2,077.44 2,175.90	18.55 20.03 21.52 23.00 24.49	-217.58 -235.01 -252.43 -269.85 -287.27	218.37 235.86 253.34 270.83 288.31	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
2,300.00 2,400.00 2,500.00 2,600.00 2,604.33	10.07 10.07 10.07 10.07 10.07	274.87 274.87 274.87 274.87 274.87	2,274.36 2,372.82 2,471.28 2,569.74 2,574.00	25.97 27.46 28.94 30.43 30.49	-304.69 -322.12 -339.54 -356.96 -357.71	305.80 323.28 340.77 358.25 359.01	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
8 5/8"									
2,700.00 2,739.95	10.07 10.07	274.87 274.87	2,668.20 2,707.53	31.91 32.51	-374.38 -381.34	375.74 382.72	0.00 0.00	0.00 0.00	0.00 0.00
Start Drop	-1.75								
2,800.00 2,900.00 3,000.00		274.87 274.87 274.87	2,766.75 2,865.74 2,965.11	33.35 34.55 35.50	-391.26 -405.38 -416.47	392.68 406.85 417.98	1.75 1.75 1.75	-1.75 -1.75 -1.75	0.00 0.00 0.00
3,100.00 3,200.00 3,300.00 3,315.38	2.02 0.27 0.00	274.87 274.87 274.87 0.00	3,064.78 3,164.65 3,264.62 3,280.00	36.19 36.62 36.79 36.79	-424.54 -429.57 -431.56 -431.60	426.08 431.13 433.13 433.16	1.75 1.75 1.75 1.75	-1.75 -1.75 -1.75 -1.75	0.00 0.00 0.00 0.00
Start 6256.0 3,400.00	00 hold at 3315.38 0.00	0.00	3,364.62	36.79	-431.60	433.16	0.00	0.00	0.00
3,500.00 3,600.00 3,700.00 3,800.00 3,900.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	3,464.62 3,564.62 3,664.62 3,764.62 3,864.62	36.79 36.79 36.79 36.79 36.79 36.79	-431.60 -431.60 -431.60 -431.60 -431.60	433.16 433.16 433.16 433.16 433.16	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
4,000.00 4,100.00		0.00 0.00	3,964.62 4,064.62	36.79 36.79	-431.60 -431.60	433.16 433.16	0.00 0.00	0.00 0.00	0.00 0.00



## **SDI** Planning Report



Database: Company: Project: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 922-30H PAD

 Site:
 NBU 922-30H PAD

 Well:
 NBU 922-30G1BS

Wellbore: OH

Design: PLAN #1 PRELIMINARY

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well NBU 922-30G1BS

GL 4941' & RKB 9' @ 4950.00ft (ASSUMED) GL 4941' & RKB 9' @ 4950.00ft (ASSUMED)

True

Minimum Curvature

Design:	PLAN #1 PRE	LIMINARY							
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,200.00	0.00	0.00	4,164.62	36.79	-431.60	433.16	0.00	0.00	0.00
4,300.00	0.00	0.00	4,264.62	36.79	-431.60	433.16	0.00	0.00	0.00
4,400.00	0.00	0.00	4,364.62	36.79	-431.60	433.16	0.00	0.00	0.00
4,500.00	0.00	0.00	4,464.62	36.79	-431.60	433.16	0.00	0.00	0.00
4,600.00	0.00	0.00	4,564.62	36.79	-431.60	433.16	0.00	0.00	0.00
4,700.00	0.00	0.00	4,664.62	36.79	-431.60	433.16	0.00	0.00	0.00
4,740.38	0.00	0.00	4,705.00	36.79	-431.60	433.16	0.00	0.00	0.00
WASATCH	0.00	0.00	1,700.00	00.70	101.00	100.10	0.00	0.00	0.00
4,800.00	0.00	0.00	4,764.62	36.79	-431.60	433.16	0.00	0.00	0.00
4,900.00	0.00	0.00	4,864.62	36.79	-431.60	433.16	0.00	0.00	0.00
5,000.00	0.00	0.00	4,964.62	36.79	-431.60	433.16	0.00	0.00	0.00
5,100.00	0.00	0.00	5,064.62	36.79	-431.60	433.16	0.00	0.00	0.00
5,200.00	0.00	0.00	5,164.62	36.79	-431.60	433.16	0.00	0.00	0.00
5,300.00	0.00	0.00	5,264.62	36.79	-431.60	433.16	0.00	0.00	0.00
5,400.00	0.00	0.00	5,364.62	36.79	-431.60	433.16	0.00	0.00	0.00
5,500.00	0.00	0.00	5,464.62	36.79	-431.60	433.16	0.00	0.00	0.00
5,600.00	0.00	0.00	5,564.62	36.79	-431.60	433.16	0.00	0.00	0.00
5,700.00	0.00	0.00	5,664.62	36.79	-431.60	433.16	0.00	0.00	0.00
5,800.00	0.00	0.00	5,764.62	36.79	-431.60	433.16	0.00	0.00	0.00
5,900.00	0.00	0.00	5,864.62	36.79	-431.60	433.16	0.00	0.00	0.00
6,000.00	0.00	0.00	5,964.62	36.79	-431.60	433.16	0.00	0.00	0.00
6,100.00	0.00	0.00	6,064.62	36.79	-431.60	433.16	0.00	0.00	0.00
6,200.00	0.00	0.00	6,164.62	36.79	-431.60	433.16	0.00	0.00	0.00
6,300.00	0.00	0.00	6,264.62	36.79	-431.60	433.16	0.00	0.00	0.00
6,400.00	0.00	0.00	6,364.62	36.79	-431.60	433.16	0.00	0.00	0.00
6,500.00	0.00	0.00	6,464.62	36.79	-431.60	433.16	0.00	0.00	0.00
6,600.00	0.00	0.00	6,564.62	36.79	-431.60	433.16	0.00	0.00	0.00
6,700.00	0.00	0.00	6,664.62	36.79	-431.60	433.16	0.00	0.00	0.00
6,800.00	0.00	0.00	6,764.62	36.79	-431.60	433.16	0.00	0.00	0.00
6,900.00	0.00	0.00	6,864.62	36.79	-431.60	433.16	0.00	0.00	0.00
7,000.00	0.00	0.00	6,964.62	36.79	-431.60	433.16	0.00	0.00	0.00
7,100.00	0.00	0.00	7,064.62	36.79	-431.60	433.16	0.00	0.00	0.00
7,200.00	0.00	0.00	7,164.62	36.79	-431.60	433.16	0.00	0.00	0.00
7,300.00	0.00	0.00	7,264.62	36.79	-431.60	433.16	0.00	0.00	0.00
7,344.38	0.00	0.00	7,309.00	36.79	-431.60	433.16	0.00	0.00	0.00
MESAVERD			,						
7,400.00	0.00	0.00	7,364.62	36.79	-431.60	433.16	0.00	0.00	0.00
7,500.00	0.00	0.00	7,464.62	36.79	-431.60	433.16	0.00	0.00	0.00
7,600.00	0.00	0.00	7,564.62	36.79	-431.60	433.16	0.00	0.00	0.00
7,700.00	0.00	0.00	7,664.62	36.79	-431.60	433.16	0.00	0.00	0.00
7,800.00	0.00	0.00	7,764.62	36.79	-431.60	433.16	0.00	0.00	0.00
7,900.00	0.00	0.00	7,864.62	36.79	-431.60	433.16	0.00	0.00	0.00
8,000.00	0.00	0.00	7,964.62	36.79	-431.60	433.16	0.00	0.00	0.00
8,100.00	0.00	0.00	8,064.62	36.79	-431.60	433.16	0.00	0.00	0.00
8,200.00	0.00	0.00	8,164.62	36.79	-431.60	433.16	0.00	0.00	0.00
8,300.00	0.00	0.00	8,264.62	36.79	-431.60	433.16	0.00	0.00	0.00
8,400.00	0.00	0.00	8,364.62	36.79	-431.60 -431.60	433.16	0.00	0.00	0.00
8,500.00	0.00	0.00	8,464.62	36.79	-431.60	433.16	0.00	0.00	0.00
8,600.00	0.00	0.00	8,564.62	36.79	-431.60	433.16	0.00	0.00	0.00
8,700.00	0.00	0.00	8,664.62	36.79	-431.60	433.16	0.00	0.00	0.00
8,800.00	0.00	0.00	8,764.62	36.79	-431.60	433.16	0.00	0.00	0.00
8,900.00	0.00	0.00	8,764.62 8,864.62	36.79 36.79	-431.60 -431.60	433.16	0.00	0.00	0.00
9,000.00	0.00	0.00	8,964.62	36.79	-431.60	433.16	0.00	0.00	0.00
9,100.00	0.00	0.00	9,064.62	36.79	-431.60	433.16	0.00	0.00	0.00
	0.00	0.00	-,	J J	.01.00	. 501.10		0.00	



# **SDI**Planning Report



Database: Company: EDM5000-RobertS-Local

Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12
Site: NBU 922-30H PAD

Wellbore:

Well:

ОН

Design:

OH PLAN #1 PRELIMINARY

NBU 922-30G1BS

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 922-30G1BS

GL 4941' & RKB 9' @ 4950.00ft (ASSUMED)

GL 4941' & RKB 9' @ 4950.00ft (ASSUMED)

True

Minimum Curvature

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,200.00	0.00	0.00	9,164.62	36.79	-431.60	433.16	0.00	0.00	0.00
9,300.00	0.00	0.00	9,264.62	36.79	-431.60	433.16	0.00	0.00	0.00
9,400.00	0.00	0.00	9,364.62	36.79	-431.60	433.16	0.00	0.00	0.00
9,500.00	0.00	0.00	9,464.62	36.79	-431.60	433.16	0.00	0.00	0.00
9,571.38	0.00	0.00	9,536.00	36.79	-431.60	433.16	0.00	0.00	0.00
-,-	0.00 <b>922-30G1BS</b>	0.00	9,536.00	36.79	-431.60	433.16	0.00	0.00	

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL_NBU 922-30G1B - plan hits target cen - Circle (radius 25.00		0.00	9,536.00	36.79	-431.60	14,533,346.02	2,066,443.60	40° 0' 36.230 N	109° 28' 42.960 W

Casing Points						
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter	
	(ft)	(ft)	Name	(in)	(in)	
	2,604.33	2,574.00 8 5/8"		8.625	11.000	

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	1,434.31 4,740.38 7,344.38	4,705.00	GREEN RIVER WASATCH MESAVERDE				

Plan Annotations					
N	leasured	Vertical	Local Coor	dinates	
	Depth	Depth	+N/-S	+E/-W	
	(ft)	(ft)	(ft)	(ft)	Comment
	300.00	300.00	0.00	0.00	Start Build 2.00
	803.50	800.91	3.75	-43.97	Start 1936.44 hold at 803.50 MD
	2,739.95	2,707.53	32.51	-381.34	Start Drop -1.75
	3,315.38	3,280.00	36.79	-431.60	Start 6256.00 hold at 3315.38 MD
	9,571.38	9,536.00	36.79	-431.60	TD at 9571.38

NBU 922-30H Pad Surface Use Plan of Operations 1 of 13

NBU 922-30G1BS / 922-30H2AS / 922-30H3AS / 922-30H3DS Kerr-McGee Oil Gas Onshore, L.P.

### Kerr-McGee Oil & Gas Onshore. L.P.

### NBU 922-30H Pad

API#	N	IBU 922-30G1BS		
	Surface:	1583 FNL / 1247 FEL	SENE	Lot
	BHL:	1547 FNL / 1679 FEL	SWNE	Lot
API#	N	IBU 922-30H2AS		
	Surface:	1564 FNL / 1224 FEL	SENE	Lot
	BHL:	1583 FNL / 612 FEL	SENE	Lot
<u>API #</u>	Ŋ	IBU 922-30H3AS		
	Surface:	1571 FNL / 1232 FEL	SENE	Lot
	BHL:	2003 FNL / 685 FEL	SENE	Lot
<u>API #</u>	Ŋ	IBU 922-30H3DS		
	Surface:	1577 FNL / 1240 FEL	SENE	Lot
	BHL:	2369 FNL / 723 FEL	SENE	Lot

This Surface Use Plan of Operations (SUPO) or 13-point plan provides site-specific information for the above-referenced wells.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

An on-site meeting was held on May 5, 2011. Present were:

- · David Gordon, Melissa Wardle, Karl Wright and Dan Emmett BLM;
- John Slaugh and Mitch Batty Timberline Engineering & Land Surveying, Inc.;
- $\cdot$   $\;$  Jacob Dunham 609 Consulting, LLC; and
- · Andy Lytle, Charles Chase, Ken Gathings, Roger Parry, Sheila Wopsock, and Grizz Oleen Kerr-McGee

### A. Existing Roads:

Existing roads consist of county and improved/unimproved access roads (two-tracks). In accordance with Onshore Order #1, Kerr-McGee will, in accordance with BMPs, improve or maintain existing roads in a condition that is the same as or better than before operations began. New or reconstructed proposed access roads are discussed in Section B.

The existing roads will be maintained in a safe and usable condition. Maintenance for existing roads will continue until final abandonment and reclamation of well pads and/or other facilities, as applicable. Road maintenance will include, but is not limited to, blading, ditching, and/or culvert installation and cleanout. To ensure safe operating conditions, gravel surfacing will be performed where excessive rutting or erosion may occur. Dust control will be performed as necessary to ensure safe operating conditions.

Roads, gathering lines and electrical distribution lines will occupy common disturbance corridors where possible. Where available, roadways will be used as the staging area and working space for installation of gathering lines. All

NBU 922-30H Pad Surface Use Plan of Operations 2 of 13

disturbances located in the same corridor will overlap each other to the maximum extent possible, while maintaining safe and sound construction and installation practices. Unless otherwise approved or requested in site specific documents, in no case will the maximum disturbance widths of the access road and utility corridors exceed the widths specified in Part D of this document.

Please refer to Topo B, for existing roads.

No segments require a ROW.

### B. New or Reconstructed Access Roads:

All new or reconstructed roads will be located, designed, and maintained to meet the standards of the BLM. BMPs. Described in the BLM's Surface Operating Standards for Oil and Gas Exploration and Development, 4th Edition (Gold Book) (USDI and USDA, 2007) and/or BLM Manual Section 9113 (1985) will be considered in consultation with the BLM in the design, construction, improvement and maintenance of all new or reconstructed roads. If a new road would cross a water of the United States, Kerr-McGee will adhere to the requirements of applicable Nationwide Permits of the Department of Army Corps of Engineers.

Well pad or pad expansion may require construction of a new access road and/or de-commissioning of an older road. Plans, routes, and distances for new roads and road improvements are provided in design packages, exhibits and maps for a project. Project-specific maps are submitted to depict the locations of existing, proposed, and/or decommissioned and include the locations for supporting structures, including, but not limited to, culverts, bridges, low water crossings, range infrastructure, and haul routes, as per OSO 1. Designs for cuts and fills, including spoils source and storage areas, are provided with the road designs, as necessary.

As applicable, Kerr-McGee may use unimproved and/or two-track roads for lease operations, to lessen total disturbance.

Road designs will be based on the road safety requirements, traffic characteristics, environmental conditions, and the vehicles the road is intended to carry. Generally, newly constructed unpaved lease roads will be crowned and ditched with the running surfaces of the roads approximately 12-18 feet wide and a total road-utility corridor width not to exceed 45 feet, except where noted in the road design for a specific project. Maximum grade will generally not exceed 8%. Borrow ditches will be back sloped 3:1 or less. Construction BMPs will be employed to control onsite and offsite erosion.

Where topography would direct storm water runoff to an access road or well pad, drainage ditches or other common drainage control facilities, such as V- or wing-ditches, will be constructed to divert surface water runoff. Drainage features, including culverts, will be constructed or installed prior to commencing other operations, including drilling or facilities placement. Riprap will be placed at the inlet and outlet at the culvert(s) adjacent to the well pad, as necessary.

Prior to construction, new access road(s) will be staked according to the requirements of OSO 1. Construction activity will not be conducted using frozen or saturated materials or during periods when significant watershed damage (e.g. rutting, extensive sheet soil erosion, formation of rills/gullies, etc.) is likely to occur. Vegetative debris will not be placed in or under fill embankments.

New road maintenance will include, but is not limited to, blading, ditching, culvert installation and cleanout, gravel surfacing where excessive rutting or erosion may occur and dust control, as necessary to ensure safe operating conditions. All vehicular traffic, personnel movement, construction/restoration operations will be confined to the approved area and to existing roadways and/or access routes.

Snow removal will be conducted on an as-needed basis to accommodate safe travel. Snow removal will occur as necessary throughout the year, as will necessary drainage ditch construction. Removed snow may be stored on permitted well pads to reduce hauling distances and/or at the aerial extent of approved disturbance boundaries to facilitate snow removal for the remainder of the season.

NBU 922-30H Pad Surface Use Plan of Operations 3 of 13

If a county road crossing or encroachment permit is needed, it will be obtained prior to construction.

There are no new roads to be constructed.

### C. Location of Existing Wells:

A) Refer to Topo Map C.

### D. Location of Existing and/or Proposed Facilities:

This pad will expand the existing pad for the NBU 186, which is a producing gas well according to Utah Division of Oil, Gas and Mining (UDOGM) records on June 2, 2011. Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee Oil and Gas Onshore LP (Kerr-McGee).

Should the well(s) prove productive, production facilities will be installed on the disturbed portion of each well pad. A bern will be constructed completely around production components that contain fluids (i.e. production tanks, produced liquids tanks, but typically excluding dehy's and/or separators). The berms will generally be constructed of compacted subsoil or corrugated metal, and will hold the capacity of the largest tank and have sufficient freeboard to accomodate a 25 year rainfall event, and be independent of the back cut. This includes pumping units. Aboveground structures constructed or installed onsite for 6 months or longer will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with the BLM (typically Shadow Gray). A production facility layout is provided as part of a project-specific APD, ROW or NOS submission.

### GAS GATHERING

Please refer to Exhibit A and Topo D- Pad and Pipeline Detail.

The gas gathering pipeline material: Steel line pipe. Surface = Bare pipe. Buried = Coated with fusion bonded epoxy coating (or equivalent). The total gas gathering pipeline distance from the meter to the tie in point is  $\pm 2,610$ ' and the individual segments are broken up as follows:

### The following segments are "onlease", no ROW needed.

- ±100' (0.02 miles) Section 30 T09S R22E (SE/4 NE/4) On-lease UTU0463, BLM surface, New 6" buried gas gathering pipeline from the meter to the proposed 30A Intersection 6" buried gas pipeline (SE/4 NE/4). Please refer to Topo D2 Pad and Pipeline Detail.
- ±150' (0.03 miles) Section 30 T09S R22E (SE/4 NE/4) On-lease UTU0463, BLM surface, New 8" buried gas gathering pipeline from the proposed 30A 6" buried gas gathering pipeline to the edge of the pad. Please refer to Exhibit A, Line 9. This pipeline will be used concurrently with the 30A pad.
- ±1,210' (0.23 miles) Section 30 T09S R22E (SE/4 NE/4) On-lease UTU0463, BLM surface, New 8" cross country buried gas gathering pipeline from the edge of the pad to the tie-in at the proposed 30B intersection 8" buried gas gathering pipeline (SE/4 NE/4). Please refer to Exhibit A, Line 8.

  This pipeline will be used concurrently with the 30A pad.
- ±320' (0.06 miles) Section 30 T09S R22E (SW/4 NE/4) On-lease UTU0463, BLM surface, New 10" buried gas gathering pipeline from the 30H 8" cross country intersection (Alignment 8) to the proposed 10" cross country gas gathering pipeline intersection (SE/4 NW/4, Alignment 3). Please refer to Exhibit A, Line 4. This pipeline will be used concurrently with the 30A, 30C, and 30B pads.
- ±510' (0.09 miles) Section 30 T09S R22E (SE/4 NW/4) On-lease UTU0463, BLM surface, New 10" cross country buried gas gathering pipeline from the proposed 10" gas gathering intersection to the proposed 10" gas pipeline (SE/4 NW/4).

  This pipeline will be used concurrently with the 30A, 30C, and 30B pads. Please refer to Exhibit A, Line 3.
- ±320' (0.06 miles) Section 30 T09S R22E (SE/4 NW/4) On-lease UTU0463, BLM surface, New 10" buried gas gathering pipeline from the proposed cross country gas gathering pipeline segment to the existing 16" gas gathering pipeline tie-in point (SE/4 NW/4). Please refer to This pipeline will be used concurrently with the 30A, 30C, 30B, 30G, and 30F pads. Exhibit A, Lines 1 and 2.

### LIQUID GATHERING

Please refer to Exhibit B and Topo D- Pad and Pipeline Detail.

Kerr-McGee proposes to install liquid gathering lines in a southwesterly direction to tie into a proposed southeasterly flowing buried pipeline. The total of this proposed liquid gathering from the meter to the Section lease line (SE/4 SE/4) is ±6,460' and the individual segments are broken up as follows:

NBU 922-30H Pad Surface Use Plan of Operations 4 of 13

### The following segments are "onlease", no ROW needed.

- ±100' (0.02 miles) Section 30 T09S R22E (SE/4 NE/4) On-lease UTU0463, BLM surface, New 6" buried liquid gathering pipeline from the separator to the proposed 30A Intersection 6" buried liquid pipeline (SE/4 NE/4). Please refer to Topo D2 Pad and Pipeline Detail.
- ±150' (0.03 miles) Section 30 T09S R22E (SE/4 NE/4) Lease UTU0463, BLM surface, New 6" buried liquid gathering pipeline from the edge of the proposed 30A pipeline intersection to the edge of the 30H pad. Please refer to Exhibit B, Line 10. This line will be used concurrently with the 30A pad.
- ±1,210' (0.23 miles) Section 30 T09S R22E (SW/4 NE/4) Lease UTU0463, BLM surface, New 6" buried cross country liquid gathering pipeline from the edge of the 30H pad to the tie-in at the proposed 6" buried liquid gathering line 30B intersection segment (SW/4 NE/4). Please refer to Exhibit B, Line 9. This pipeline will be used concurrently with the 30A pad.
- ±320' (0.06 miles) Section 30 T09S R22E (SW/4 NE/4) Lease UTU0463, BLM surface, New 6" buried liquid gathering pipeline from the proposed 30B/30H 6" buried liquid gathering pipeline intersection to the proposed 6" cross country liquid gathering pipeline (SE/4 NW/4).

  Please refer to Exhibit A, Line 5. This pipeline will be used concurrently with the 30A, 30C, and 30B pads.
- ±510' (0.09 miles) Section 30 T09S R22E (SE/4 NW/4) Lease UTU0463, BLM surface, New 6" buried liquid gathering pipeline from the proposed 6" 30B pipeline segment to the proposed 6" liquid gathering pipeline segment (SW/4 NE/4). Please refer to Exhibit B, Line 4. This pipeline will be used concurrently with the 30A, 30C, and 30B pads.
- ±285' (0.05 miles) Section 30 T09S R22E (SW/4 NE/4) Lease UTU0463, BLM surface, New 6" buried liquid gathering pipeline from the proposed 30B cross country 6" liquid gathering line to the (2) proposed twin 6" liquid gathering pipelines at the 30F intersection (SE/4 NW/4). Please refer Exhibit B, Line 3. This pipeline will be used concurrently with the 30A, 30C, 30B, 30G, and 30F pads.
- ±495' (0.09 miles) Section 30 T09S R22E (SE/4 NW/4) Lease UTU0463, BLM surface, Two (2) new 6" buried liquid gathering pipelines from the proposed Transfer line to the tie-in point at the proposed 30G/30F intersection (SW/4 NE/4). Please refer Exhibit B, Line 13. This pipeline will be used concurrently with the 30A, 30C, 30B, 30F, 30G, 30N, and 30L pads. Two (2) Lines for a total of 990'.
- ±2,895' (0.55 miles) Section 30 T09S R22E (SW/4 NE/4) Lease UTU0463, BLM surface, New 6" buried liquid gathering pipeline from the proposed 30G/30F intersection going southeast to the edge of the lease boundry of SE/4 SE/4. Please refer to Exhibit B, Line 15. The remaining liquid pipeline segment will travel to the existing tank battery on State surface. Kerr-McGee will apply for the appropriate State easements under separate cover. This pipeline will be used concurrently with the 30A, 30C, 30B, 30F, 30G, 30N, and 30L pads.

Kerr-McGee, additionally will install a liquid gathering line in a southwesterly direction to tie-into a proposed northwesterly flowing buried pipeline. The total of this proposed liquid gathering from the meter to the tie in point is  $\pm 7,165$ ' and the individual segments are broken up as follows:

### The following segments are "onlease", no ROW needed.

- ±100' (0.02 miles) Section 30 T09S R22E (SE/4 NE/4) On-lease UTU0463, BLM surface, New 6" buried liquid gathering pipeline from the separator to the proposed 30A Intersection 6" buried liquid gathering pipeline (SE/4 NE/4). Please refer to Topo D2 Pad and Pipeline Detail.
- ±150' (0.03 miles) Section 30 T09S R22E (SE/4 NE/4) Lease UTU0463, BLM surface, New 6" buried liquid gathering pipeline from the edge of the proposed 30A 6" buried liquid gathering pipeline to the edge of the pad. Please refer to Exhibit B, Line 10.
- ±1,210' (0.23 miles) Section 30 T09S R22E (SW/4 NE/4) Lease UTU0463, BLM surface, New 6" buried cross country liquid gathering pipeline from the edge of the 30H pad to the tie-in at the proposed 6" buried liquid gathering line 30B intersection segment (SW/4 NE/4). Please refer to Exhibit B, Line 9. This pipeline will be used concurrently with the 30H pad.
- ±320' (0.06 miles) Section 30 T09S R22E (SW/4 NE/4) Lease UTU0463, BLM surface, New 6" buried liquid gathering pipeline from the proposed 30B/30H 6" buried liquid gathering pipeline intersection to the proposed 6" cross country liquid gathering pipeline (SE/4 NW/4).
- Please refer to Exhibit A, Line 5. This pipeline will be used concurrently with the 30H, 30C, and 30B pads.  $\pm 510^{\circ}$  (0.09 miles) Section 30 T09S R22E (SE/4 NW/4) Lease UTU0463, BLM surface, New 6"
- buried liquid gathering pipeline from the proposed 6" 30B pipeline segment to the proposed 6" liquid gathering pipeline segment (SW/4 NE/4). Please refer to Exhibit B, Line 4. This pipeline will be used concurrently with the 30H, 30C, and 30B pads.
- ±285' (0.05 miles) Section 30 T09S R22E (SW/4 NE/4) Lease UTU0463, BLM surface, New 6" buried liquid gathering pipeline from the proposed 30B cross country 6" liquid gathering line to the (2) proposed twin 6" liquid gathing pipelines at the 30F intersection (SE/4 NW/4). Please refer Exhibit B, Line 3. This pipeline will be used concurrently with the 30H, 30C, 30B, 30G, and 30F pads.

NBU 922-30H Pad Surface Use Plan of Operations 5 of 13

±1,010' (0.19 miles) – Section 30 T09S R22E (SE/4 NW/4) – Lease UTU0463, BLM surface, Two (2) new 6" buried liquid gathering pipelines from the proposed 30G Intersection to the proposed 30L intersection (SE/4 NW/4). Please refer to Exhibit B, Line 2. This pipeline will be used concurrently with the 30H, 30C, 30B, 30F, 30G, 30N, and 30L pads. Two (2) lines for a total of 2,020'.

±1,285' (0.24 miles) – Section 30 T09S R22E (NW/4 SW/4) – Lease UTU0463, BLM surface, Two (2) new 6" buried liquid gathering pipelines from the proposed 30L Intersection to the West Line of Section 30 where it will tie-into an existing liquid gathering pipeline on State surface. Please refer to Exhibit B, Line 1. Two (2) lines for a total of 2,570'. This pipeline will be used concurrently with the 30H, 30C, 30B, 30F, 30G, 30N, and 30L pads.

### **Pipeline Gathering Construction**

Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr-McGee. Gas gathering pipeline(s,) gas lift, or liquids pipelines may be constructed to lie on the surface or be buried. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. The area of disturbance during construction from the edge of road or well pad will typically be 30' in width. Where pipelines run cross country, the width of disturbance will typically be 45' for buried lines and 30' for surface lines. In addition, Kerr-McGee requests for a permanent 30' distrubance width that will be maintained for the portion adjacent to the road. The need for the 30' permanent distrubance width is for maintenance and repairs. Cross country permanent distrubance width also are required to be 30'.

Above-ground installation will generally not require clearing of vegetation or blading of the surface, except where safety considerations necessitate earthwork. In some surface pipeline installation instances pipe cannot be constructed where it will lay. In these cases where an above-ground pipeline is constructed parallel and adjacent to a road, it will be welded/fused on the road and then lifted from the road to the pipeline route. In other cases where a pipeline route is not parallel and adjacent to a road (cross-country between sites), it will be welded/fused in place at a well pad, access road, or designated work area and pulled between connection locations with a suitable piece of equipment.

Buried pipelines will generally be installed parallel and adjacent to existing and/or newly constructed roads and within the permitted disturbance corridor. Buried pipelines may vary from 2 inches (typically fuel gas lines) to 24 inches (typically transportation lines) in diameter, but 6 to 16 inches is typical for a buried gas line. The diameter of liquids pipelines may vary from 2 inches to 12 inches, but 6 inches is the typical diameter. Gas lift lines may vary from 2 to 12 inches in diameter, but 6-inch diameter pipes are generally used for gas lift. If all three lines are present (gas gathering, gas lift, and fluids), they will share a common trench where possible.

Typically, to install a buried pipeline, topsoil will be removed, windrowed and placed on the non-working side of the route for later reclamation. Because working room is limited, the spoil may be spread out across the working side and construction will take place on the spoil. The working side of the corridor will be used for pipe stringing, bending, welding and equipment travel. Small areas on the working side displaying ruts or uneven ground will be groomed to facilitate the safe passage of equipment. After the pipelines are installed, spoil will be placed back into the trench, and the topsoil will be redistributed over the disturbed corridor prior to final reclamation. Typical depth of the trench will be 6 feet, but depths may vary according to site-specific conditions (presence of bedrock, etc.). The proposed trench width for the pipeline would range from 18-48 inches.

The pipeline will be welded along the proposed route and lowered into place. Trenching equipment will cut through the soil or into the bedrock and create good backfill, eliminating the need to remove large rocks. The proposed buried pipeline will be visually and radiographically inspected and the entire pipeline will be pneumatically or hydrostatically tested before being placed into service. Routine vehicle traffic will be prevented from using pipeline routes as travel ways by posting signs at the route's intersection with an access road.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

If pipelines or roads encounter a drainage that could be subject to flooding or surface water during extreme precipitation events, Kerr-McGee will apply all applicable Army Corps mandates as well as the BLM's Hydraulic Considerations for Pipeline Crossings of Stream Channels (BLM Technical Note 423, April 2007). In addition, all stream and drainage crossings will be evaluated to determine the need for stream alteration permits from the State of Utah Division of Water Rights and if necessary, required permits will be secured. Similarly, where a road or pipeline crossing exists the pipe will be butt welded and buried to a depth between 24 and 48 inches or more. Dirt roads will be cut and restored to a condition equivalent to the existing condition. All Uintah County road encroachment and crossing permits, where applicable, will be obtained prior to crossing construction. In no case will pressure testing of pipelines result in discharge of liquids to the surface. Please see site specific PODs and/or mapping materials for location of related facilities such as cathodic protection wells or pumping stations. Pipeline signs will be installed along the route to indicate the pipeline proximity, ownership, and

NBU 922-30H Pad Surface Use Plan of Operations 6 of 13

to provide emergency contact phone numbers. Above ground valves, lateral T's, and/or cathodic protection wells will be installed at various locations for production integrity and safety purposes.

Upon completion of the proposed buried pipeline, the entire area of disturbance will be reclaimed to the standards proposed in the Green River District Reclamation Guidelines. Please refer to section J for more details regarding final reclamation.

When no longer deemed necessary by the operator, Kerr-McGee or it's successor will consult with the BLM, Vernal Field Office before terminating of the use of the pipeline(s).

### The Anadarko Completions Transportation System (ACTS) information:

Please refer to Exhibit C for ACTs Lines

Upon completion of the wells on this pad, Kerr-McGee is also requesting to utilize the pit on this the proposed location as an Anadarko Completion Transport System (ACTS) staging pit which will be utilized for other completion operations in the area. The ACTS process will reduce the amount of truck traffic on a field-wide basis, also reducing vehicle emissions and fugitive dust generation.

Kerr-McGee will use ACTS to optimize the completion processes for multiple pads across the project area which may include up to a section of development. ACTS will facilitate management of frac fluids by utilizing existing reserve pits and temporary, surface-laid aluminum pipe liquids transfer lines between frac locations. The pit will be refurbished as follows: mix and pile up drill cuttings with dry dirt, bury the original liner in the pit, walk bottom of pit with cat. Kerr-McGee will reline the pit with a 30 mil liner and double felt padding. The refurbished pit will be the same size or smaller as specified in the originally approved ROW/APD. The pit refurb will be done in a normal procedure and there will be no modification to the pit. Hog fence panels (5' X 16') will be built and painted shadow gray and will be put up on the work side of the pit. Polypropylene netting will be installed over all pits.

The collected hydrocarbons will be treated and sold at approved sales facilities. A loading rack with drip containment will also be installed where water trucks can unload and load to prevent damage caused from pulling hoses in and out of the pit.

ACTS will require temporarily laying multiple 6" aluminum pipe water transfer lines on the surface between either existing or refurbished reserve pits. Please see the attached ACTS exhibit C for placement of the proposed temporary lines. The temporary aluminum transfer lines will be utilized to transport frac fluid being injected and/or recovered during the completion process and will be laid adjacent to existing access roads or pipeline corridors. Upon completion of the frac operation, the liquids transfer lines will be flushed with fresh water and purged with compressed air. The contents of the transfer lines will be flushed into a water truck for delivery to another ACTS location or a reserve pit.

The volume of frac fluid transported through a water transfer line will vary, but volume is projected to be approximately 1.75 bbls per 50-foot joint. Although the maximum working pressure is 125 psig, the liquids transfer lines will be operated at a pressure of approximately 30 to 40 psig. Kerr-McGee requests to keep the netted pit open for one year from first production. During this time the surrounding well location completion fluids may be recycled in this pit and utilized for other frac jobs in the area. After one year Kerr-McGee will backfill the pit and reclaim. Kerr-McGee understands that due to the temporary nature of this system BLM considers this a casual use situation; therefore, no permanent ROW or temporary use plan will need to be issued by the BLM.

### E. Location and Types of Water Supply:

Water for drilling and completion operations will be obtained from the following sources:

Permit # 49-2307	JD Field Services	Green River- Section 15, T2N, R22E
Permit # 49-2321	R.N. Industries	White River- Section 2, T10S, R24E
Permit # 49-2319	R.N. Industries	White River- Various Sources
Permit # 49-2320	R.N. Industries	Green River- Section 33, T8S, R23E

Water will be hauled to location over the roads marked on Maps A and B.

NBU 922-30H Pad Surface Use Plan of Operations 7 of 13

No water well is to be drilled on this lease.

### F. Construction Materials:

Construction operations will typically be completed with native materials found on location. Construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source (described in site-specific documents). No construction materials will be removed from federal lands without prior approval from the BLM. A source location other than an on-location construction site will be designated either via a map or narrative within the project specific materials provided to the BLM.

### G. Methods for Handling Waste:

All wastes subject to regulation will be handled in compliance with applicable laws to minimize the potential for leaks or spills to the environment. Kerr-McGee also maintains a Spill Control and Countermeasure Plan, which includes notification requirements, including to the BLM, for all reportable spills of oil, produced liquids, and hazardous materials.

Any accidental release, such as a leak or spill in excess of the reportable quantity, as established by 40 CFR Part 117.3, will be reported as per the requirements of CERCLA, Section 102 B. If a release involves petroleum hydrocarbons or produced liquids, Kerr-McGee will comply with the notification requirements of NTL-3A. Drill cuttings and/or drilling fluids will be contained in the reserve/frac pit. Cuttings will be buried in pit(s) upon closure. Unless specifically approved by the BLM, no oil or other oil-based drilling additives, chromium/metals-based or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface precipitation runoff into the pit (via appropriate placement of subsoil/topsoil storage areas and/or construction of berms, ditches, etc). Should unexpected liquid petroleum hydrocarbons (crude oil or condensate) be encountered during drilling, completions or well testing, liquid petroleum hydrocarbons will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be released into a pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by the BLM. Should timely removal not be feasible, the pit will be netted as soon as practical. Similarly, hydrocarbon removal will take place prior to the closure of the pit, unless authorization is provided for disposal via alternate pit closure methods (e.g. solidification).

The reserve and/or fracture stimulation pit will be lined with an impermeable liner. The liner will be a synthetic material 30 mil or thicker. The bottom and side walls of the pit will be void of any sharp rocks that could puncture the liner. The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. After evaporation and when dry, the reserve pit liners will be cut off, ripped and/or folded back (as safety considerations allow) as near to the mud surface as possible and buried on location or hauled to a landfill prior to backfilling the pit with a minimum of five feet of soil material.

Where necessary and if conditions (freeboard, etc.) allow, produced liquids from newly completed wells may be temporarily disposed of into pits for a period not to exceed 90 days as per Onshore Order Number 7 (OSO 7). Subsequently, permanent approved produced water disposal methods will be employed in accordance with OSO 7 and/or as described in a Water Management Plan (WMP). Otherwise, fluids disposal locations and associated haul routes, for ROW consideration, are typically depicted on Topo A of individual projects. Revisions to the water source or method of transportation will be subject to written approval from the BLM.

Any additional pits necessary for subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

NBU 922-30H Pad Surface Use Plan of Operations 8 of 13

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after six (6) months from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Additional drying methods may include fly-ash solidification or sprinkler evaporation. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse (trash and other solid waste including cans, paper, cable, etc.) generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility. Immediately after removal of the drilling rig, all debris and other waste materials not contained within trash receptacles will be collected and removed from the well location.

For the protection of livestock and wildlife, all open pits (excluding flare pits) will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42" and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16'. Siphons, catchments, and absorbent pads will be installed to keep hydrocarbons produced by the drilling rig or other equipment on location from entering the reserve pit. Hydrocarbons, contaminated pads, and/or soils will be disposed of in accordance with state and federal requirements.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

### Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Hazardous materials may be contained in some grease or lubricants, solvents, acids, paint, and herbicides, among others as defined above. Kerr-McGee maintains a file, per 29 CFR 1910.1200 (g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances that are used during the course of construction, drilling, completion, and production operations for this project. The transport, use, storage and handling of hazardous materials will follow procedures specified by federal and state regulations. Transportation of hazardous materials to the well location is regulated by the Department of Transportation (DOT) under 49 CFR, Parts 171-180. DOT regulations pertain to the packing, container handling, labeling, vehicle placarding, and other safety aspects.

Potentially hazardous materials used in the development or operation of wells will be kept in limited quantities on well sites and at the production facilities for short periods of time. Chemicals meeting the criteria for being an acutely hazardous material/substance, or meet the quantities criteria per BLM Instruction Memorandum No. 93-344, will not be used.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities and may be kept in limited quantities on drilling sites and well locations for short periods of time during drilling or completion activities.

NBU 922-30H Pad Surface Use Plan of Operations 9 of 13

Fluids disposal and pipeline/haul routes are depicted on Topo Map A.

Any produced water separated from recoverable condensate from the proposed well will be contained in a water tank and will then be transported by pipeline and/or truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E NBU #159 in Sec. 35 T9S R21E Ace Oilfield in Sec. 2 T6S R20E MC&MC in Sec. 12 T6S R19E Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

Or to one of the following Kerr-McGee active Salt Water Disposal (SWD) wells:

NBU 159 SWD in Sec. 35 T9S R21E CIGE 112D SWD in Sec. 19 T9S R21E CIGE 114 SWD in Sec. 34 T9S R21E NBU 921-34K SWD in Sec. 34 T9S R21E NBU 921-33F SWD in Sec. 34 T9S R21E

#### H. Ancillary Facilities:

No additional ancillary facilities are planned for this location.

#### I. Well Site Layout:

The location, orientation and aerial extent of each drill pad, reserve/completion/flare pit, access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure; proposed cuts and fills; and topsoil and spoil material stockpile locations are depicted on the exhibits for each project where applicable. Site-specific conditions may require slight deviation in actual equipment and facility layout; however, the area of disturbance, as described in the survey, will not be exceeded

For the protection of livestock and wildlife, all open pits and cellars will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Each well will utilize either a centralized tank battery, centralized fluids management system, or have tanks installed on its pad. Production tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks are not to be used for disposal of liquids from additional sources without prior approval of BLM.

Where produced liquids tanks are utilized, the tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids. The tanks will be fenced or capped to prevent livestock or wildlife entry. The tanks will be kept reasonably free from surface accumulations of liquid hydrocarbons. The tanks are not to be used for disposal of liquids from additional sources without the prior approval of the BLM.

NBU 922-30H Pad Surface Use Plan of Operations 10 of 13

#### J. Plans for Surface Reclamation:

The surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. Interim reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but is not limited to the re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

#### Interim Reclamation

Interim reclamation may include pit evaporation, fluid removal, pit solidification, re-contouring, ripping, spreading top soil, seeding, and/or weed control. Interim reclamation will be performed in accordance with OSO 1, or written notification will be provided to the BLM for approval. Where feasible, drilling locations, reserve pits, or access routes not utilized for production operations will be re-contoured to a natural appearance.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit. Disposal of pit fluids and linings is discussed in Section G.

#### **Final Reclamation**

Final reclamation will be performed for unproductive wells and after the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by Kerr-McGee. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. The BLM will be notified prior to commencement of reclamation operations. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring the site to the approximate contour that existed prior to pad construction, final grading will be conducted over the entire surface of the well site and access road. The area will be ripped to a depth of 18 to 24" on 18 to 24" centers, where practical. The surface soil material will be pitted with small depressions to form longitudinal depressions 12 to 18"deep, where practical. The entire area will be uniformly covered with the depressions constructed perpendicular to the natural flow of water.

NBU 922-30H Pad Surface Use Plan of Operations 11 of 13

Reclamation of roads will be performed at the discretion of the BLM. All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded in accordance with the seeding specifications of the BLM.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to the BLM.

#### Measures Common to Interim and Final Reclamation

Soil preparation will be conducted using a disk for areas in need of more soil preparation following site preparation. This will provide primary soil tillage to a depth no greater than 6 inches. Prior to reseeding, compacted areas will be scarified by ripping or chiseling to loosen compacted soils, promote water infiltration, and improve soil aeration and root penetration.

Seeding will occur year-round as conditions allow and will typically be accomplished through the use of a no-till rangeland style seed drill with a "picker box" in order to seed "fluffy" seed. Where drill seeding is not the preferred method, seed will be broadcast and then raked into the ground at double the rate of drill seeding. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-vegetation. The seed mixes will be selected from a list provided by or approved by the BLM, or a specific seed mix will be proposed by Kerr-McGee to the BLM and used after its approval. The selected specific seed mix for each well location and road segment will be utilized while performing interim and final reclamation for each project. All seed will be certified and tags will be maintained by Kerr-McGee. Every effort will be made to obtain "cheat grass free seed".

Seed Mix to be used for Well Site, Access Road, and Pipeline (as applicable):

Shadescale Mix	e Live Seed lbs/acre
Indian Ricegrass (Nezpar)	3
Sandberg bluegrass	0.75
Bottlebrush squirreltail	1
Great Basin Wildrye	0.5
Crested wheatgrass (Ephraim)	1.5
Winterfat	0.25
Shadscale	1.5
Four-wing saltbush	0.75
Forage Kochia	0.25
Total	9.5

Additional soil amendments and/or stabilization may be required on sites with poor soils and/or excessive erosion potential. Where severe erosion can become a problem and/or the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. Slopes will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to: erosion control blankets, hydro-mulch, and/or bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage. Soil amendments such as "Sustain" (an organic fertilizer that will be applied at the rate 1,800 – 2,100 lbs/acre with seed) may also be dry broadcast or applied with hydro-seeding equipment.

#### Weed Control

All weed management will be done in accordance with the Vernal BLM Surface Disturbance Weed Policy. Noxious weeds will be controlled, as applicable, on project areas. Monitoring and management of noxious and/or invasive weeds of concern will be completed annually until the project is deemed successfully reclaimed by the surface management agency and/or owner according to the Anadarko Integrated Weed Management Plan. Noxious weed infestations will be mapped using a GPS unit and submitted to the BLM with information required in the Vernal BLM Surface Disturbance Weed

NBU 922-30H Pad Surface Use Plan of Operations 12 of 13

Policy. If herbicide is to be applied it will be done according to an approved Pesticide Use Permit (PUP), inclusive of applicable locations. All pesticide applications will be recorded using a Pesticide Application Record (PAR) and will be submitted along with a Pesticide Use Report (PUR) annually prior to Dec. 31.

#### Monitoring

Monitoring of reclaimed project areas will be completed annually during the growing season and actions to ensure reclamation success will be taken as needed. During the first two growing seasons an ocular methodology will be used to determine the success of the reclamation activities. During the 3rd growing season a 200 point line intercept (quantitative) methodology will be used to obtain basal cover. The goal is to have the reclaimed area reach 30% basal cover when compared to the reference site. If after three growing seasons the area has not reached 30% basal cover, additional reclamation activities may be necessary. Monitoring will continue until the reclaimed area reaches 75% basal cover of desirable vegetation when compared to the reference site. (Green River District Reclamation Guidelines)

All monitoring reports will be submitted electronically to the Vernal BLM in the form of a geo-database no later than March 31 of the calendar year following the data collection.

#### K. Surface/Mineral Ownership:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

#### L. Other Information:

#### **Onsite Specifics:**

- A 404 Stream Alteration Permit will be obtained to cross the Sand Wash in the SE/4 of the section See Exhibit A or B.
- The operator will obtain the necessary 404 Sream Alteration Permit for the associated pipeline coridor for this pad.
- Facilities: Will be painted Shadow Grey
- Existing surface gas gathering pipeline will be removed from location if no longer in service

#### **Cultural and Paleontological Resources**

All personnel are strictly prohibited from collecting artifacts, any paleontological specimens or fossils, and from disturbing any significant cultural resources in the area. If artifacts, fossils, or any culturally sensitive materials are exposed or identified in the area of construction, all construction operations that would affect the newly discovered resource will cease, and Kerr-McGee will provide immediate notification to the BLM.

#### Resource Reports:

A Class I literature survey was completed on February 11, 2011, by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 10-243b.

A paleontological reconnaissance survey was completed on December 27, 2010, by Intermountain Paleo-Consulting. For additional details please refer to report IPC #10-32.

Biological field survey was completed on January 27, 2011, by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-400.

Biological field survey was completed for the Southeast Trunk Liquid Line on June 2, 2011, by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-457.

NBU 922-30H Pad Surface Use Plan of Operations 13 of 13

#### M. Lessee's or Operators' Representative & Certification:

Andy Lytle Regulatory Analyst I Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6100 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Laura Abrams

June 2, 2011

Date

API Well Number: 43047517020000



Kerr-McGee Oil & Gas Onshore LP PO Box 173779 DENVER, CO 80217-3779

April 4, 2011

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11

NBU 922-30G1BS

T9S-R22E

Section 30 SENE (Surf), SWNE (Bottom)

Surface: 1583' FNL, 1247' FEL Bottom Hole: 1547' FNL, 1679' FEL

Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling.

- Kerr-McGee's NBU 922-30G1BS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing roads and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Joe Matney Sr. Staff Landman

Joe Matines

API Well Number: 43047517020000

# **United States Department of the Interior**

# **BUREAU OF LAND MANAGEMENT**

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

June 27, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2011 within the Natural Buttes Unit, Uintah County, Utah.

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

#### **NBU 922-30M PAD**

NDU 322-30W PAL	,						
43-047-51691	NBU	922-30L4CS BHL			_	0216 0758	
43-047-51692	NBU	922-30M1BS BHL			_	0215 0758	
43-047-51693	NBU	922-30M1CS BHL				0213 0757	
43-047-51694	NBU	922-30M4BS BHL			_	0210 0757	
		922-30N4CS BHL	 	 	 	0212 1974	
<b>NBU 922-30G PAD</b> 43-047-51696	-	922-30G3DS BHL				2411 1846	
43-047-51697	NBU	922-30G4BS BHL				2403 1677	
43-047-51698	NBU	922-3012AS BHL				2419 0856	
43-047-51699	NBU	922-30J1BS BHL				2426 1675	

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 922-30G PAI	)									
43-047-51700	NBU	922-30G1CS BHL								
43-047-51701	NBU	922-30J4BS BHL								
NBU 922-30H PAD	)									
43-047-51702	NBU	922-30G1BS								
		BHL	Sec	30	T09S	R22E	1547	FNL	1679	FEL
43-047-51703	NBU	922-30H2AS	Sec	30	T09S	R22E	1564	FNL	1224	FEL
		BHL	Sec	30	T09S	R22E	1583	FNL	0612	FEL
43-047-51704	NBU	922-30H3AS	Sec	30	T09S	R22E	1571	FNL	1232	FEL
		BHL	Sec	30	T09S	R22E	2003	FNL	0685	FEL
43-047-51705	NBU	922-30H3DS	Sec	30	T09S	R22E	1577	FNL	1240	FEL
		BHL	Sec	30	T09S	R22E	2369	FNL	0723	FEL
NBU 922-30L PAD										
43-047-51706	NBU	922-30E4BS								
		BHL	Sec	30	T095	RZZE	2194	F.N.L	0760	F.M.T
43-047-51707	NBU	922-30E4CS								
		BHL	Sec	30	T09S	R22E	2519	FNL	0760	FWL
43-047-51708	NBU	922-30K4BS	Sec	30	T09S	R22E	2106	FSL	0817	FWL
		BHL	Sec	30	T09S	R22E	1872	FSL	1978	FWL
43-047-51709	NBU	922-30L1BS	Sec	30	T09S	R22E	2090	FSL	0792	FWL
		BHL	Sec	30	T09S	R22E	2355	FSL	0759	FWL
43-047-51710	NBU	922-30L4BS	Sec	30	т095	R22E	2096	FSL	0800	FWT.
10 01, 01,10	1.20	BHL								
922-30N PAD										
43-047-51711	NBU	922-30N1BS								
		BHL	Sec	30	T09S	R22E	1222	r'SĹ	1976	₽'WĹ
43-047-51712	NBU	922-30J4CS	Sec	30	T09S	R22E	0547	FSL	1754	FWL
		BHL	Sec	30	T09S	R22E	1384	FSL	1673	FEL

43-047-51713 NBU 922-30K4CS Sec 30 T09S R22E 0539 FSL 1724 FWL

43-047-51714 NBU 922-30N4BS Sec 30 T09S R22E 0544 FSL 1744 FWL

43-047-51715 NBU 922-3001BS Sec 30 T09S R22E 0550 FSL 1763 FWL

BHL Sec 30 T09S R22E 1547 FSL 1977 FWL

BHL Sec 30 T09S R22E 0571 FSL 1974 FWL

BHL Sec 30 T09S R22E 1058 FSL 1672 FEL

API Well Number: 43047517020000

Page 3

API # WELL NAME

(Proposed PZ WASATCH-MESA VERDE)

#### 922-30N PAD

BHL Sec 30 T09S R22E 0732 FSL 1671 FEL

This office has no objection to permitting the wells at this time.

LOCATION

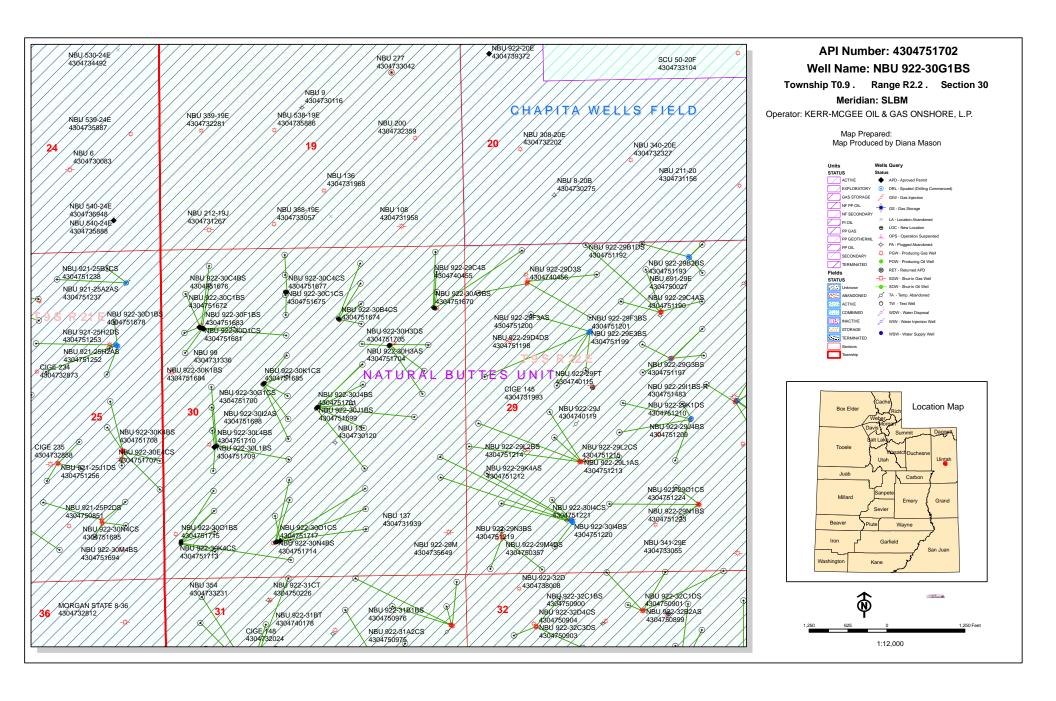
Michael L. Coulthard

DN: cn=Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals, email=Michael\_Coulthard@blm.gov, c=US Date: 2011.06.27 08:54:22 -06'00'

bcc: File - Natural Buttes Unit Division of Oil Gas and Mining

> Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:6-27-11



API Well Number: 43047517020000

# WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 6/21/2011 **API NO. ASSIGNED:** 43047517020000

WELL NAME: NBU 922-30G1BS

**OPERATOR:** KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) PHONE NUMBER: 720 929-6356

**CONTACT:** Laura Abrams

PROPOSED LOCATION: SENE 30 090S 220E **Permit Tech Review:** 

> SURFACE: 1583 FNL 1247 FEL **Engineering Review:**

**BOTTOM:** 1547 FNL 1679 FEL Geology Review:

**COUNTY: UINTAH** 

**LATITUDE:** 40.00995 **LONGITUDE:** -109.47698

**UTM SURF EASTINGS: 629991.00** NORTHINGS: 4429763.00

FIELD NAME: NATURAL BUTTES LEASE TYPE: 1 - Federal

**LEASE NUMBER: UTU463** PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 1 - Federal **COALBED METHANE: NO** 

**RECEIVED AND/OR REVIEWED: LOCATION AND SITING:** 

 PLAT R649-2-3.

Unit: NATURAL BUTTES Bond: FEDERAL - WYB000291

**Potash** R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

**Drilling Unit** Oil Shale 190-13

Board Cause No: Cause 173-14 Water Permit: 43-8496

**Effective Date:** 12/2/1999 **RDCC Review:** 

Siting: Suspends General Siting **Fee Surface Agreement** 

✓ Intent to Commingle ✓ R649-3-11. Directional Drill

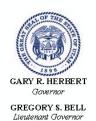
**Commingling Approved** 

**Comments:** Presite Completed

Stipulations:

3 - Commingling - ddoucet 4 - Federal Approval - dmason 15 - Directional - dmason 17 - Oil Shale 190-5(b) - dmason

API Well No: 43047517020000



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

# **Permit To Drill**

\*\*\*\*\*

Well Name: NBU 922-30G1BS **API Well Number:** 43047517020000

Lease Number: UTU463 Surface Owner: FEDERAL Approval Date: 8/17/2011

#### **Issued to:**

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

## **Commingle:**

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

API Well No: 43047517020000

## **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

## **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:** 

For John Rogers Associate Director, Oil & Gas Form 3160-3 (August 2007)

# RECEIVED

UNITED STATES JULY (1127)
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0136 Expires July 31, 2010

_	
-	Lease Serial No.
ο.	Lease Serial No.
	UTU463
	11111403

APPLICATION FOR PERMIT	TO BRILVIOR WI	emei Utan	6. If Indian, Allottee or Tri	be Name		
1a. Type of Work: 🗷 DRILL 🔲 REENTER			7. If Unit or CA Agreemen UTU63047A	t, Name and No.		
1b. Type of Well: ☐ Oil Well    Gas Well ☐ Ot	her 🔀 Sinj	gle Zone	8. Lease Name and Well N NBU 922-30G1BS	0.		
	LAURA ABRAMS		9. API Well No. 43-647-51	702-		
3a. Address PO BOX 173779 DENVER, CO 80202-3779	3b. Phone No. (inclu Ph: 720-929-635 Fx: 720-929-735	i6	10. Field and Pool, or Expl NATURAL BUTTES	oratory		
4. Location of Well (Report location clearly and in accorded	ince with any State requ	irements.*)	11. Sec., T., R., M., or Blk.	and Survey or Area		
At surface SENE 1583FNL 1247FEL	40.009928 N Lat, 1	09.477745 W Lon	Sec 30 T9S R22E M	1er SLB		
At proposed prod. zone SWNE 1547FNL 1679FEL	40.010029 N Lat, 1	109.479286 W Lon				
14. Distance in miles and direction from nearest town or post APPROXIMATELY 42.2 MILES SOUTH OF VE			12. County or Parish UINTAH COUNTY	13. State UT		
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in L	ease	17. Spacing Unit dedicated	to this well		
1547'	551.00					
18. Distance from proposed location to nearest well, drilling,	19. Proposed Depth		20. BLM/BIA Bond No. on	file		
completed, applied for, on this lease, ft. 541'	9571 MD 9536 TVD		WYB000291			
21. Elevations (Show whether DF, KB, RT, GL, etc. 4942 GL	22. Approximate date 12/01/2011	e work will start	23. Estimated duration 60-90 DAYS			
	24. Atta	achments				
The following, completed in accordance with the requirements o	f Onshore Oil and Gas C	Order No. 1, shall be attached to the	nis form:			
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Off</li> </ol>	em Lands, the ice).	4. Bond to cover the operation Item 20 above). 5. Operator certification 6. Such other site specific info authorized officer.	·			
25. Signature (Electronic Submission)	Name (Printed/Typed) LAURA ABRAN	) MS Ph: 720-929-6356		Date 06/21/2011		
Title REGULATORY ANALYST II						
Approved by (Signature)	Jerry Kenczka		<sup>D</sup> DEC 0 6 20			
Assistant Field Manager Lands & Mineral Resources	Office VER	NAL FIELD OFFICE				
Application approval does not warrant or certify the applicant ho- operations thereon. Conditions of approval, if any, are attached.	ds legal or equitable titl	e to those rights in the subject lea				
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, n States any false, fictitious or fraudulent statements or representati		erson knowingly and willfully to				
Additional Operator Remarks (see next page)			BEC			

Electronic Submission #111110 verified by the BLM Well Information System For KERR-MCGEE OIL&GAS ONSHORE, LP, sent to the Vernal

NOTICE OF APPROVAL

03-31-11 DOSted

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

115X50486AE



# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

VERNAL, UT 84078

(435) 781-4400



# CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

Kerr-McGee Oil & Gas Onshore, LP

170 South 500 East

NBU 922-30G1BS

API No: 43-047-51702

Location: Lease No:

Agreement:

SENE, Sec. 30, T9S, R22E

UTU-463

**Natural Buttes** 

**OFFICE NUMBER:** 

(435) 781-4400

**OFFICE FAX NUMBER:** 

(435) 781-3420

# A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

#### NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	_	Twenty-Four (24) hours prior to running casing and cementing all casing strings to:  blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)		Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

# SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- Kerr McGee will adhere to all applicant committed conservation measures and conservation recommendations that are stated in the USFWS's "Final Biological Opinion for the Anadarko Petroleum Corporation Natural Buttes Unit and Bonanza Area Natural Gas Development Project.
- The operator will follow the Green River District Reclamation Guidelines for Reclamation.

# Mitigation for Invasive Weeds

- All vehicles and equipment -will be cleaned either through power-washing, or other approved method, if the vehicles or equipment were previously operated outside the Uinta Basin, to prevent weed seed introduction.
- All disturbance areas will be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established
- Noxious and invasive weeds will be controlled throughout the area of project disturbance.
- Noxious weeds will be inventoried and reported to BLM in the annual reclamation report. Where an
  integrated pest management program is applicable, coordination has been undertaken with the
  state and local management program (if existing). A copy of the pest management plan will be
  submitted for each project.
- A pesticide use permit (PUP) will be obtained for the project, if applicable.

## Mitigation for Paleontology

• A permitted paleontologist is to be present for monitor purposes during all surface disturbing actives: examples include the following building of the well pad, access road, and pipelines

### Mitigation Measures for Colorado River Fish Species:

- The best method to avoid entrapment is to pump from an off-channel location one that does not connect to the river during high spring flows. An infiltration gallery constructed in a BLM and Service approved location is best.
- If the pump head is located in the river channel where larval fish are known to occur, the following measures apply:
  - a. do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes:
  - b. limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (see above); and
  - c. limit the amount of pumping, to the greatest extent possible, during the pre-dawn hours as larval drift studies indicate that this is a period of greatest daily activity.
- Screen all pump intakes with 3/32" mesh material.
- Report any fish impinged on the intake screen to the Service (801.975.3330) and the Utah Division of Wildlife Resources:

Northeastern Region 152 East 100 North, Vernal, UT 84078 Phone: (435) 781-9453

Page 3 of 7 Well: NBU 922-30G1BS 12/5/2011

# Mitigation for Migratory birds.

- Construction and drilling is not allowed from January 1 August 31 to minimize impacts during Golden Eagle and Red-tailed hawk nesting
- If it is anticipated that construction or drilling will occur during the given timing restriction, a BLM or
  qualified biologist shall be notified so surveys can be conducted. Depending upon the results of the
  surveys, permission to proceed may or may not be recommended or granted by the BLM biologist.

officer.

Page 4 of 7 Well: NBU 922-30G1BS

12/5/2011

# DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.
- Surface casing cement shall be brought to surface.
- Production casing cement shall be brought 200' up and into the surface casing.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

# DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times.
   Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB

Page 5 of 7 Well: NBU 922-30G1BS 12/5/2011

or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

#### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - O Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

Page 7 of 7 Well: NBU 922-30G1BS 12/5/2011

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
  Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
  future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
  BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
  hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
  be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to
  the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first.
  All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All
  product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in
  accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval
  of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office
  Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in
  order that a representative may witness plugging operations. If a well is suspended or abandoned,
  all pits must be fenced immediately until they are backfilled. The "Subsequent Report of
  Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of
  the well bore, showing location of plugs, amount of cement in each, and amount of casing left in
  hole, and the current status of the surface restoration.

Sundry Number: 26630 API Well Number: 43047517020000

	FORM 9		
ı	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU463		
SUNDR	Y NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047517020000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 8021	<b>PHONE NUMBER:</b> 7 3779 720 929-	9. FIELD and POOL or WILDCAT: 65NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Merio	dian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start.	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
,	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:			
6/1/2012	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
DRILLING REPORT	L TUBING REPAIR	U VENT OR FLARE	☐ WATER DISPOSAL ☐
Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
MIRU TRIPLE A BU RAN 14" 36.7# SC	COMPLETED OPERATIONS. Clearly show CKET RIG. DRILLED 20" CON HEDULE 10 CONDUCTOR PI (. SPUD WELL LOCATION ON HRS.	NDUCTOR HOLE TO 40'. IPE. CEMENT WITH 28	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY June 07, 2012
NAME (PLEASE PRINT)	PHONE NUME	BER TITLE	
Jaime Scharnowske	720 929-6304	Regulartory Analyst	
SIGNATURE N/A		DATE 6/7/2012	

SUBMIT AS EMAIL

# BLM - Vernal Field Office - Notification Form

Submitted By J. Scharnowske Phone Number 720.929.6304 Well Name/Number NBU 922-30G1BS
Qtr/Qtr <u>SENE</u> Section 30 Township 9S Range 22E Lease Serial Number <u>UTU463</u> API Number 4304751702
<u>Spud Notice</u> – Spud is the initial spudding of the well, not drilling out below a casing string.
Date/Time <u>06/01/2012</u> <u>07:00 HRS</u> AM PM
<ul> <li>Casing – Please report time casing run starts, not cementing times.</li> <li>✓ Surface Casing</li> <li>Intermediate Casing</li> <li>Production Casing</li> <li>Liner</li> <li>Other</li> </ul>
Date/Time 06/16/2012 08:00 HRS AM PM
BOPE Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other  RECEIVED MAY 3 0 2012  DIV. OF OIL, GAS & MINING
Date/Time AM
Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT 435.828.0986 OR LOVEL YOUNG AT 435.781.7051

#### STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

#### **ENTITY ACTION FORM**

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

P.O. Box 173779

city DENVER

state CO

zip 80217

Phone Number: (720) 929-6304

#### Well 1

API Number	Well	Name	QQ	QQ Sec Twp		Sec Twp Rr		Rng	County
4304751702	NBU 922-30	SIBS SENE 3			98	22E	UINTAH		
Action Code	Current Entity New Entity Number Number		S	Spud Date			ty Assignment fective Date		
В.	99999	2900	6/1/2012			611	4 12012		
MIRU TRIPLE A BUCKET RIG. WSMVD SPUD WELL LOCATION ON 06/01/2012 AT 08:00 HRS. BHL: SWN2									

Vell 2							
API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304751705	NBU 922-30I	H3DS	SENE	30	98	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
_ B	99999	2900	6/1/2012		6/14/12013		
Comments:			1			<del></del>	

MIRU TRIPLE A BUCKET RIG.

MSMND

SPUD WELL LOCATION ON 06/01/2012 AT 11:00 HRS. BAL: Serve

Well 3

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304751704	NBU 922-3	NBU 922-30H3AS SENE 30 9S		98	22E	UINTAH	
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
, B	99999	2900	6/1/2012		61	0/14/12012	
Comments:	TOIDI E A DUOVET O		l a	15MV			· · · · · · · · · · · · · · · · · · ·

MIRU TRIPLE A BUCKET RIG.

SPUD WELL LOCATION ON 06/01/2012 AT 13:30 HRS. BHL: Sens

## **ACTION CODES:**

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

RECEIVED

JAIME SCHARNOWSKE

Name (Please Print) Jaim Schaumisk

Signature

REGULATORY ANALYST

6/7/2012

Title

Date

JUN 0 3 2012

Sundry Number: 27217 API Well Number: 43047517020000

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCE		FORM 9
ı	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU463		
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly reenter plugged wells, or to drill horizo n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047517020000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 80217	<b>PHONE NUMBER:</b> 73779 720 929-0	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	<b>HP, RANGE, MERIDIAN:</b> 0 Township: 09.0S Range: 22.0E Meridi	ian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICAT	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT     Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
6/29/2012	WILDOW WELL DETERMINATION	OTHER	
	□ WILDCAT WELL DETERMINATION  COMPLETED OPERATIONS. Clearly show a  5/26/2012. DRILLED SURFAC		
SURFACE CASING	AND CEMENTED. WELL IS WANT JOB WILL BE INCLUDED WI	ITING ON ROTARY RIG.	Accepted by the Utah Division of Oil, Gas and Mining
	REPORT.		FOR RECORD ONLY July 03, 2012
			July 03, 2012
NAME (PLEASE PRINT) Cara Mahler	<b>PHONE NUMB</b> 720 929-6029	ER TITLE Regulatory Analyst I	
SIGNATURE	120 323-0023	DATE	
N/A		6/29/2012	

Sundry Number: 27788 API Well Number: 43047517020000 FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES		FORM 9  5.LEASE DESIGNATION AND SERIAL NUMBER:
	DIVISION OF OIL, GAS, AND MINING	G	UTU463
	RY NOTICES AND REPORTS ON	_	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal m for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047517020000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18t	PHO h Street, Suite 600, Denver, CO, 80217 37	ONE NUMBER: 79 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSI Qtr/Qtr: SENE Section: 3	HIP, RANGE, MERIDIAN: 30 Township: 09.0S Range: 22.0E Meridian:	S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
The Operator re Specifically, the C loop drilling option casing change inclu casing to 4-1/2 in aspects of the prev	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF	the drilling plan. FIT wavier, closed age. The production 80 11.6 LB BTC/LTC C casing. All other ill not change. These	CASING REPAIR  CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  APD EXTENSION  OTHER:  DEPths, volumes, etc.  Accepted by the Utah Division of Oil, Gas and Mining  Date: July 23, 2012  By:
		I	
NAME (PLEASE PRINT) Jaime Scharnowske	<b>PHONE NUMBER</b> 720 929-6304	TITLE Regulartory Analyst	
SIGNATURE N/A		<b>DATE</b> 7/16/2012	

Sundry Number: 29650 API Well Number: 43047517020000

	STATE OF UTAH		FORM 9
ı	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU463
SUNDR	RY NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047517020000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18tl	PHO h Street, Suite 600, Denver, CO, 80217 377	<b>DNE NUMBER:</b> 79 720 929-6	9. FIELD and POOL or WILDCAT: 5NIATUERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 3	HIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Meridian:	S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT		ALTER CASING CHANGE TUBING	CASING REPAIR CHANGE WELL NAME
Approximate date work will start:  SUBSEQUENT REPORT	☐ CHANGE WELL STATUS ☐	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
Date of Work Completion:		FRACTURE TREAT PLUG AND ABANDON	☐ PLUG BACK
SPUD REPORT Date of Spud:		RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON
✓ DRILLING REPORT		VENT OR FLARE	WATER DISPOSAL
Report Date: 9/5/2012		SI TA STATUS EXTENSION OTHER	OTHER:
	COMPLETED OPERATIONS. Clearly show all per the month of August 2012. We		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY September 11, 2012
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulartory Analyst	
SIGNATURE N/A		DATE 9/5/2012	

Sundry Number: 30565 API Well Number: 43047517020000

	STATE OF UTAH				FORM 9
ı	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIT	-	3	5.LEASE UTU46	DESIGNATION AND SERIAL NUMBER:
SUNDR	Y NOTICES AND REPORTS	ON	WELLS	6. IF IND	IAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	posals to drill new wells, significantly reenter plugged wells, or to drill horizon n for such proposals.	deep ontal l	en existing wells below aterals. Use APPLICATION		r CA AGREEMENT NAME: AL BUTTES
1. TYPE OF WELL Gas Well				1	NAME and NUMBER: 22-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			<b>9. API NU</b> 43047	JMBER: 517020000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 8021		NE NUMBER: 720 929-6	1	and POOL or WILDCAT: AL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL				COUNTY	
QTR/QTR, SECTION, TOWNSH	IIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Meric	dian: S	3	STATE: UTAH	
11. CHECI	K APPROPRIATE BOXES TO INDICA	TE N	ATURE OF NOTICE, REPOR	T, OR O	THER DATA
TYPE OF SUBMISSION			TYPE OF ACTION		
	ACIDIZE		ALTER CASING		CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING		CHANGE WELL NAME
	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS		CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	RACTURE TREAT		NEW CONSTRUCTION
	OPERATOR CHANGE	□ Р	PLUG AND ABANDON		PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	□ R	RECLAMATION OF WELL SITE		RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	□s	SIDETRACK TO REPAIR WELL		TEMPORARY ABANDON
	TUBING REPAIR	□ v	/ENT OR FLARE		WATER DISPOSAL
✓ DRILLING REPORT Report Date:	WATER SHUTOFF	□ s	SI TA STATUS EXTENSION		APD EXTENSION
10/3/2012	WILDCAT WELL DETERMINATION		OTHER	ОТНЕ	ER:
12 DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	all no	rtinent details including dates, d		<u>'</u>
l .	ne month of September 201			FOI	Accepted by the Utah Division of il, Gas and Mining R RECORD ONLY October 05, 2012
NAME (PLEASE PRINT) Lindsey Frazier	<b>PHONE NUME</b> 720 929-6857	BER	TITLE Regulatory Analyst II		
SIGNATURE N/A			<b>DATE</b> 10/3/2012		

Sundry Number: 31649 API Well Number: 43047517020000

	STATE OF UTAH		FORM 9
ı	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU463
SUNDR	Y NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly reenter plugged wells, or to drill horize n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		<b>9. API NUMBER:</b> 43047517020000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 8021	<b>PHONE NUMBER:</b> 720 929	9. FIELD and POOL or WILDCAT: -C5NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	HP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Merio	dian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT     Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
11/5/2012	WILDCAT WELL DETERMINATION	OTUER	OTHER:
		U OTHER	<u> </u>
	the month of October 2012		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY November 05, 2012
NAME (PLEASE PRINT) Jaime Scharnowske	<b>PHONE NUM</b> 720 929-6304	BER TITLE Regulartory Analyst	
SIGNATURE	720 929-0304	DATE	
N/A		11/5/2012	

Sundry Number: 32766 API Well Number: 43047517020000

	STATE OF UTAH				FORM 9
ı	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MII		i	5.LEASE D UTU463	ESIGNATION AND SERIAL NUMBER:
SUNDR	Y NOTICES AND REPORTS	ON	WELLS	6. IF INDIA	N, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly reenter plugged wells, or to drill horizon n for such proposals.				CA AGREEMENT NAME: L BUTTES
1. TYPE OF WELL 8				AME and NUMBER: 2-30G1BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			<b>9. API NUN</b> 430475	MBER: 17020000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 8021		<b>NE NUMBER:</b> 9 720 929-6		nd POOL or WILDCAT: L BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL				COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 3	IIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Merio	dian: S	3	STATE: UTAH	
11. CHECI	K APPROPRIATE BOXES TO INDICA	TE NA	ATURE OF NOTICE, REPOR	T, OR OT	HER DATA
TYPE OF SUBMISSION			TYPE OF ACTION		
	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION  COMPLETED OPERATIONS. Clearly show he month of November 201	C		OTHER:  OTHER:  OTHER:  OFFOR	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON VATER DISPOSAL APPLEXTENSION THE COMPLETE DIFFERENT FORMATION TO SERVICE DIFFERENT FORMA
NAME (PLEASE PRINT)	PHONE NUMB	BER	TITLE		
Lindsey Frazier SIGNATURE	720 929-6857	_	Regulatory Analyst II  DATE		
N/A			12/3/2012		

Sundry Number: 33379 API Well Number: 43047517020000

	STATE OF UTAH		FORM 9
ı	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU463
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly reenter plugged wells, or to drill horizo n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047517020000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	h Street, Suite 600, Denver, CO, 8021	<b>PHONE NUMBER:</b> 73779 720 929-	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Merid	lian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT     Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
1/2/2013	WILDCAT WELL DETERMINATION		OTHER:
		U OTHER	<u>'</u>
	completed operations. Clearly show the month of December 201.		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY January 03, 2013
NAME (PLEASE PRINT) Lindsey Frazier	<b>PHONE NUMB</b> 720 929-6857	BER TITLE Regulatory Analyst II	
SIGNATURE	120 320 0031	DATE	
N/A		1/2/2013	

RECEIVED: Jan. 02, 2013

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES		FORM 9  5.LEASE DESIGNATION AND SERIAL NUMBER:	
	DIVISION OF OIL, GAS, AND MINING	3	UTU463	
	RY NOTICES AND REPORTS ON		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for pro current bottom-hole depth, FOR PERMIT TO DRILL form	oposals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal n for such proposals.	pen existing wells below laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047517020000	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18tl	PHC h Street, Suite 600, Denver, CO, 80217 377	ONE NUMBER: 720 929-6	9. FIELD and POOL or WILDCAT: 5MATERAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Meridian:	S	STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPOR	T, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
	ACIDIZE	ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start: 1/29/2013	✓ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME	
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION	
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK	
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON	
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL	
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION	
Report Date:	☐ WILDCAT WELL DETERMINATION ✓	OTHER	OTHER: DV Tool	
12. DESCRIBE PROPOSED OR		rtinent details including dates, d		
The operator requests authorization to place a DV tool in the production casing string and run a 2 stage cement job after setting the production casing to ensure cement is properly circulated to surface. Below describes how it will be conducted: Run I-80 casing from TD to approximately 4,200 feet where the DV Tool will be placed. Run a centralizer and cement basket on the I80 joint below the DV Tool (use a stop ring to keep the CMT Basket at top of the tool joint). Run a DV Tool at approximately 4,200 feet. Run LTC/DXQ crossover. Run a centralizer and a cement basket on the Crossover (use a stop ring to keep the CMT Basket at bottom of the tool joint). Run DXQ casing to surface. The actual depth details will be captured in the well completion report.				
NAME (PLEASE PRINT) Lindsey Frazier	<b>PHONE NUMBER</b> 720 929-6857	TITLE Regulatory Analyst II		
SIGNATURE N/A		DATE 1/29/2013		

Sundry Number: 34417 API Well Number: 43047517020000

	STATE OF UTAH		FORM 9
[	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINIF		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU463
SUNDR	Y NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	posals to drill new wells, significantly de reenter plugged wells, or to drill horizont n for such proposals.	epen existing wells below al laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		<b>9. API NUMBER:</b> 43047517020000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 3779 720 929-6	9. FIELD and POOL or WILDCAT: 5NATUERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 3	IIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Meridiar	n: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
✓ DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
2/4/2013			
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
No Activity for	COMPLETED OPERATIONS. Clearly show all the month of January 2013.	Well TD at 2,760	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY February 13, 2013
NAME (PLEASE PRINT) Lindsey Frazier	<b>PHONE NUMBER</b> 720 929-6857	R TITLE Regulatory Analyst II	
SIGNATURE N/A		DATE 2/4/2013	

RECEIVED: Feb. 04, 2013

Sundry Number: 35250 API Well Number: 43047517020000

	STATE OF UTAH			FC	ORM 9
ı	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND M		3	5.LEASE DESIGNATION AND SERIAL NUI UTU463	MBER:
SUNDR	Y NOTICES AND REPORTS	ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAM	E:
	posals to drill new wells, significantl reenter plugged wells, or to drill horiz n for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER: NBU 922-30G1BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			9. API NUMBER: 43047517020000	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 802		NE NUMBER: 9 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL				COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 3	IIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Meri	dian: S	3	STATE: UTAH	
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE N	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION			TYPE OF ACTION		
	ACIDIZE		ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING	CHANGE WELL NAME	
	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	FRACTURE TREAT	NEW CONSTRUCTION	
	OPERATOR CHANGE	F	PLUG AND ABANDON	PLUG BACK	
SPUD REPORT	PRODUCTION START OR RESUME	□ F	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
Date of Spud:	REPERFORATE CURRENT FORMATION	П.	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON	
	TUBING REPAIR		/ENT OR FLARE	WATER DISPOSAL	
✓ DRILLING REPORT					
Report Date: 3/4/2013	WATER SHUTOFF	□ <b>:</b>	SI TA STATUS EXTENSION	APD EXTENSION	
37 17 = 0 1 0	WILDCAT WELL DETERMINATION		DTHER	OTHER:	
No Activity for	COMPLETED OPERATIONS. Clearly show the month of February 201	3. W	ell TD at 2,760	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONL March 05, 2013	Y
NAME (PLEASE PRINT) Lindsey Frazier	<b>PHONE NUM</b> 720 929-6857	BER	TITLE Regulatory Analyst II		
SIGNATURE N/A			<b>DATE</b> 3/4/2013		

Sundry Number: 36297 API Well Number: 43047517020000

	STATE OF UTAH		FORM 9
I	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	9	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU463
SUNDR	Y NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047517020000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	PHC n Street, Suite 600, Denver, CO, 80217 377	<b>DNE NUMBER:</b> 79 720 929-6	9. FIELD and POOL or WILDCAT: 5NATUERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 3	IIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Meridian: \$	S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
□ NOTICE OF INTENT		ALTER CASING CHANGE TUBING	CASING REPAIR  CHANGE WELL NAME
Approximate date work will start:		COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:		FRACTURE TREAT	NEW CONSTRUCTION
SPUD REPORT		PLUG AND ABANDON RECLAMATION OF WELL SITE	☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
✓ DRILLING REPORT Report Date:		VENT OR FLARE SI TA STATUS EXTENSION	WATER DISPOSAL  APD EXTENSION
4/3/2013		OTHER	OTHER:
	COMPLETED OPERATIONS. Clearly show all peopre the month of March 2013. We		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY April 04, 2013
NAME (PLEASE PRINT) Teena Paulo	<b>PHONE NUMBER</b> 720 929-6236	TITLE Staff Regulatory Specialist	
SIGNATURE N/A		<b>DATE</b> 4/3/2013	

Sundry Number: 37396 API Well Number: 43047517020000

	STATE OF UTAH				FORM 9
ι	DEPARTMENT OF NATURAL RESOUF DIVISION OF OIL, GAS, AND M			5.LEASE DESIGNATION AND UTU463	SERIAL NUMBER:
SUNDR	RY NOTICES AND REPORTS	S ON	WELLS	6. IF INDIAN, ALLOTTEE OR	TRIBE NAME:
	posals to drill new wells, significantl reenter plugged wells, or to drill horiz n for such proposals.			7.UNIT or CA AGREEMENT NATURAL BUTTES	NAME:
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER NBU 922-30G1BS	₹:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			9. API NUMBER: 43047517020000	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	h Street, Suite 600, Denver, CO, 802		<b>NE NUMBER</b> : 720 929-6	9. FIELD and POOL or WILD 5NATURAL BUTTES	CAT:
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL				COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Meri	idian: S	3	STATE: UTAH	
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE NA	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION			TYPE OF ACTION		
	ACIDIZE		LTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	□ c	HANGE TUBING	CHANGE WELL NAME	
	CHANGE WELL STATUS	□ c	OMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	RACTURE TREAT	NEW CONSTRUCTION	
	OPERATOR CHANGE	P	LUG AND ABANDON	PLUG BACK	
SPUD REPORT	PRODUCTION START OR RESUME	□ R	ECLAMATION OF WELL SITE	RECOMPLETE DIFFEREN	T FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	□ s	IDETRACK TO REPAIR WELL	TEMPORARY ABANDON	
	TUBING REPAIR	□ v	ENT OR FLARE	WATER DISPOSAL	
DRILLING REPORT Report Date:	WATER SHUTOFF	□ s	I TA STATUS EXTENSION	APD EXTENSION	
5/3/2013	_		TUED	OTHER:	i
	WILDCAT WELL DETERMINATION		inex	Į.	
	COMPLETED OPERATIONS. Clearly shown or the month of April 2013.			Accepted by the Utah Division Oil, Gas and Mir FOR RECORI May 03, 2013	of ning DONLY
NAME (DI EACE DRINT)	DHONE NUM	IDED	TITLE		
NAME (PLEASE PRINT) Teena Paulo	<b>PHONE NUM</b> 720 929-6236	IBER	TITLE Staff Regulatory Specialist		
SIGNATURE N/A			<b>DATE</b> 5/3/2013		

RECEIVED: May. 03, 2013

Sundry Number: 38631 API Well Number: 43047517020000

	STATE OF UTAH		FORM 9
1	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINII		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU463
SUNDR	RY NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly de reenter plugged wells, or to drill horizont n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047517020000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18tl	F h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 3	HIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Meridiar	n: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOF	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION  COMPLETED OPERATIONS. Clearly show all COMPLETING THE WELL TO		CASING REPAIR  CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  APD EXTENSION  OTHER:  DEPths, volumes, etc.  Accepted by the Utah Division of Oil, Gas and Mining  FOR RECORD ONLY  June 10, 2013
NAME (PLEASE PRINT)	PHONE NUMBER		
Luke Urban SIGNATURE	720 929-6501	Regulatory Specialist  DATE	
N/A		6/5/2013	

Sundry Number: 39286 API Well Number: 43047517020000

	STATE OF UTAH		FORM 9
ı	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU463
SUNDR	Y NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly reenter plugged wells, or to drill horize n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-30G1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047517020000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 8021	<b>PHONE NUMBER:</b> 17 3779 720 929-0	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1583 FNL 1247 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 3	HIP, RANGE, MERIDIAN: 0 Township: 09.0S Range: 22.0E Merio	dian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT     Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
6/21/2013	WILDCAT WELL DETERMINATION	OTHER	OTHER:
THE SUBJECT WEL	COMPLETED OPERATIONS. Clearly show L WAS PLACED ON PRODUC WELL HISTORY WILL BE SUB COMPLETION REPORT.	CTION ON 6/21/2013. THE MITTED WITH THE WELL	·
NAME (PLEASE PRINT) Teena Paulo	<b>PHONE NUM</b> 720 929-6236	BER TITLE Staff Regulatory Specialist	
SIGNATURE N/A		<b>DATE</b> 6/24/2013	

Form 3160-4 (August 2007)			DEPA BUREA	RTME	NT O		INTER								OM	B No. 1	PROVED 004-0137 y 31, 2010
	WELL (	COMPI	LETION	OR R	ECO	MPLE	TION	REPC	RT	AND L	.OG				ease Serial I	No.	
1a. Type of	Well	Oil Well	l 🛛 Gas	Well		Dry	Othe	r						6. If	Indian, All	ottee o	r Tribe Name
b. Type of	Completion	Oth	New Well er	o w	ork Ov	ver [	☐ Deep	en 🗖	Plug	Back		iff. Re	esvr.	7. U	nit or CA A	greem	ent Name and No.
2. Name of	Operator					Contac	t: TEEI	IA PAUI	LO						ease Name		ell No.
	MĈGEE OII		DNSHORE	Æ-Mail:	teena	n.paulo(	@anada								IBU 922-3		<u> </u>
3. Address	DENVER	, CO 80		1.		*.1		Ph: 720	0-929		e area	code)			PI Well No		43-047-51702
4. Location	`	•	,					•	· ·	)*					IATURAL		Exploratory ES
At surfac	ce SENE	1583FN	L 1247FEL	. 40.009	9928 1	N Lat, 1	09.477	745 W L	on					11. \$	Sec., T., R.,	M., or	Block and Survey
	rod interval	•			43FNI	L 1680F	FEL							12. (	County or P		9S R22E Mer SLB 13. State UT
At total of 14. Date Sp	1	NE 1330	3FNL 1679	Date T.I	) Read	rhed		16	Date	Complet	ed					DF KI	B, RT, GL)*
06/01/2				4/12/20		ched			D &	A 🛮 1/2013	Ready	y to Pr			496	67 KB	5, K1, GE)
18. Total Do	•	MD TVD	9555 9516	3			ack T.D.		ID VD		96 57		20. Dep	th Bri	dge Plug Se	1	MD TVD
21. Type El CBL/GF	ectric & Oth R/CCL/TEM	ner Mecha  P	nnical Logs	Run (Su	bmit c	opy of e	each)				l '	Was D	ell cored ST run? ional Sur		<b>⊠</b> No	TYes	s (Submit analysis) s (Submit analysis) s (Submit analysis)
23. Casing an	d Liner Rec	ord (Rep	ort all string	s set in	well)												<b>.</b>
Hole Size	Size/G	rade	Wt. (#/ft.)		op (D)	Bott (Ml	D)	age Cem Depth	l	Туре	of Sks. of Cen		Slurry (BB		Cement 7	Гор*	Amount Pulled
11.000	8.6	25 IJ-55	28.	o. <b>/</b> ///////////	<b>₩₩₩</b>		2738 ₩	((((((((((((((((((((((((((((((((((((((	<b>XXXXXXX</b>	₩₩₩ <b></b>		675				0	
7.875	4.	500 I-80	11.	6	26	!	9520					1525				675	
			-	-		<u> </u>											
				+		<del>                                     </del>	-+										
				+													
24. Tubing	Record		1				<u> </u>			<u>I</u>			l .				
Size I	Depth Set (N	(ID) F	acker Deptl	n (MD)	Si	ize	Depth S	et (MD)	P	acker De	pth (M	ID)	Size	De	pth Set (M	D)	Packer Depth (MD)
2.375		8992					106.0	2	<u>_</u>								
25. Producir					T _		26. Pe	rforation		-						I	
	rmation WASA	A TOLL	Тор	0400		ottom		Perfor	rated	Interval	·O 744	<del></del>	Size	$\neg$	No. Holes	ODE	Perf. Status
A) B)	MESAVE			6106 7444		7199 9398	+			6106 T 7444 T		_	0.36	_		OPEI OPEI	
C)	MESAVE	INDL		7 444		3330				7444 1	0 33.		0.50		100	OI LI	· ·
D)																	
27. Acid, Fra	acture, Treat	ment, Ce	ment Squee	ze, Etc.	•												
I	Depth Interv									nount and			aterial				
	61	06 TO 9	398 PUMP	11,718	BBLS	SLICK F	120 & 27	2,725 LB	S 30/	50 OTTA	NA SA	ND					
28. Producti	on - Interval	A															
	Test	Hours	Test	Oil		Gas	Wate	r	Oil Gr	avity		Gas		Producti	on Method		
Produced 06/21/2013	Date 07/01/2013	Tested 24	Production	BBL 0.	_	MCF 1229.	BBL	0.0	Corr. A	API		Gravity			EI OV	NS EDO	OM WELL
	Tbg. Press.	Csg.	24 Hr.	Oil		Gas	Wate		Gas:O	il		Well Sta	atus		1 LOV	10 1 KC	JIVI VVLLL
Size		Press. 1290.0	Rate	BBL	)	MCF 1229	BBL	0	Ratio				GW				
28a. Product	tion - Interva	al B															

Hours Tested

Csg. Press.

Test Production

24 Hr.

Rate

Oil BBL

BBL

Date First Produced

Choke

Size

Test Date

Tbg. Press. Flwg.

Gas MCF

Water BBL

Water BBL

Oil Gravity Corr. API

Gas:Oil Ratio

Gas Gravity

Well Status

Production Method

28b. Prod	duction - Inter	val C										
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity		Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well S	tatus			
28c. Proc	duction - Interv	/al D		<u> </u>	<u> </u>	I	I					
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity		Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well S	tatus			
29. Dispo	osition of Gas(	Sold, used	for fuel, vent	ed, etc.)		•	•	•				
30. Sumr	nary of Porous	Zones (Ir	nclude Aquife	rs):					31. Form	nation (Log) Mar	rkers	
tests,	all important including dep ecoveries.	zones of p th interval	orosity and c tested, cushic	ontents ther on used, tim	eof: Corece tool ope	d intervals an en, flowing ar	nd all drill-stem and shut-in pressures					
	Formation		Top	Bottom		Descript	tions, Contents, etc.			Name		Top  Meas. Deptl
32. Addi	tional remarks	(include p	olugging proce	edure):					MAI WAS	D'S NEST HOGANY SATCH SAVERDE		1794 2299 4772 7442
The for the from 4984 final	first 210 ft of e surface hol 4984 feet - 4	the surface was dril 987 feet. t. Attache	ce hole was led with an 1 DQX csg wa	drilled with 11 inch bit. as run from	A DV to surface	ol was place to 4984 ft; L	he remainder ed in the well LTC csg was run fr on report and	rom				
	ectrical/Mecha andry Notice for	_		-		<ul><li>2. Geolog</li><li>6. Core A</li></ul>	•		DST Rep Other:	ort	4. Direction	nal Survey

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

Name (please print) TEENA PAULO

(Electronic Submission)

Title STAFF REGULATORY SPECIALIST

Date <u>07/19/2013</u>

				U:	S ROCI	KIES RE	GION	
				Opera	tion S	umma	ry Report	
Well: NBU 922-3	0G1BS RED						Spud Date: 6/2	26/2012
Project: UTAH-U	INTAH		Site: NBL	J 922-30H	I PAD			Rig Name No: H&P 298/298, CAPSTAR 310/310
Event: DRILLING	3		Start Date	e: 6/13/20	12			End Date: 4/13/2013
Active Datum: RI	KB @4,967.00usft (a	above Mean S	ea	UWI: SE	/NE/0/9/	S/22/E/30/	0/0/26/PM/N/15	883/E/0/1247/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
6/26/2012	12:00 - 18:00	6.00	MIRU	01	A	Р	(COL)	MOVE RIG 5 MILES 6 HOLCROFT HEAVY HAUL TRUCKS WITH DRIVERS 2 JD HEAVY HAUL TRUCKS WITH DRIVERS 3 STALLION 1 TON TRUCKS WITH 4 STALLION PERSONELL 2 NOV HANDS 2 KOCERCA HANDS 5 CAPSTAR HANDS 1 SYSCOM HAND 1 KNOPP CONSULTING, LLC
	18:00 - 21:00	3.00	MIRU	01	В	Р		RIG UP
	21:00 - 23:00	2.00	MIRU	01	В	Р		WELD ON RISER HOOK UP TANKS
	23:00 - 23:30	0.50	PRPSPD	06	Α	Р		PICK UP MOTOR MAKE UP 12 1/4" BIT
	23:30 - 0:00	0.50	DRLSUR	02	D	P		SPUD DRILL 12.25" SURFACE HOLE F/ 49'-64' ROP= 161' @ 81 FPH WOB= 14/22K RPM= 55/105 SPP=720/500 GPM= 595 TRQ= 2600/1900 PU/SO/ROT = 32/28/30 NO LOSSES HOLE IN GOOD SHAPE
6/27/2012	0:00 - 2:00 2:00 - 2:30	2.00	DRLSUR	02	D	P		DRILL 12.25" SURFACE HOLE F/ 64'-212'  ROP= 148' @ 74 FPH  WOB= 14/22K  RPM= 55/105  SPP=720/500  GPM= 595  TRQ= 2600/1900  PU/SO/ROT = 32/28/30  NO LOSSES  HOLE IN GOOD SHAPE  PULL OUT OF HOLE
	2:30 - 3:30	1.00	DRLSUR	06	Α	Р		PICK UP 11" BIT & DIR. TOOLS
	0.00							SCRIBE TOOLS
	3:30 - 4:00	0.50	DRLSUR	06	Α	Р		TRIP IN HOLE TO 212'
	4:00 - 7:00	3.00	DRLSUR	02	D	Р		DRILL 11.00" SURFACE HOLE F/ 210'-655'  ROP= 445' @ 148 FPH  WOB= 22/30K  RPM= 55/105  SPP=800/550  GPM= 595  TRQ= 2900/1900  PU/SO/ROT = 45/36/40  NO LOSSES  HOLE IN GOOD SHAPE

### API Well Number: 43047517020000 US ROCKIES REGION **Operation Summary Report** Well: NBU 922-30G1BS RED Spud Date: 6/26/2012 Project: UTAH-UINTAH Site: NBU 922-30H PAD Rig Name No: H&P 298/298, CAPSTAR 310/310 **Event: DRILLING** End Date: 4/13/2013 Start Date: 6/13/2012 UWI: SE/NE/0/9/S/22/E/30/0/0/26/PM/N/1583/E/0/1247/0/0 Active Datum: RKB @4,967.00usft (above Mean Sea P/U Date Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 7:30 - 13:00 5.50 DRLSUR 02 Ρ D DRILL 11.00" SURFACE HOLE F/ 655'-1410' ROP= 755' @ 137 FPH WOB= 22/30K RPM= 55/105 SPP=1290/900 GPM= 595 TRQ= 2900/1900 PU/SO/ROT = 78/61/70 NO LOSSES HOLE IN GOOD SHAPE 1.5' RIGHT & 1.2' HIGH OF LINE 13:00 - 13:30 0.50 **DRLSUR** RIG SERVICE 13:30 - 0:00 Р 10.50 **DRLSUR** 02 D DRILL 11.00" SURFACE HOLE F/ 1410'-2316' ROP= 906' @ 86 FPH WOB= 22/30K RPM= 55/105 SPP=1250ON BOTTOM & 997 OFF BTTM TRQ= 2900/1900 UP/DWN/ROT = 100/85/91 NO LOSSES HOLE IN GOOD SHAPE 5' RIGHT & 11' HIGH OF LINE 6/28/2012 0:00 - 0:30 0.50 **DRLSUR** 08 Ζ \*\*\* FAILURE: RIG EQUIPMENT- (PUMP) 0:30 - 4:30 Р 4 00 DRI SUR 02 D DRILL 11.00" SURFACE HOLE F/ 2316'-2575' ROP= 259' @ 64.75 FPH WOB= 22/30K RPM= 55/105 SPP=1050 PSI ON BOTTOM 747 OFF BTTM GPM= 546 TRQ= 2900/1900 UP/DWN/ROT = 100/85/91 PARTIAL LOSSES 1' LEFT AND 6' HIGH OF LINE 4:30 - 5:30 1.00 **DRLSUR** 22 F Х \*\*\*FAILURE: MUD/PUMP-(AIRED UP) PULLED 10 JOINTS TO INVESTIGATE. 5:30 - 8:30 3.00 **DRLSUR** 02 D Ρ DRILL 11.00" SURFACE HOLE F/ 2575'-2760' ROP= 61.66' @ 64.75 FPH WOB= 22/30K RPM= 55/105 SPP=1230 PSI ON BOTTOM 980 PSI OFF BTTM GPM= 546 TRQ= 2900/1900 UP/DWN/ROT = 119/88/93 PARTIAL LOSSES 5.4' LEFT AND 2.5' HIGH OF LINE TD @ 08:30 8:30 - 9:30 1.00 **DRLSUR** Ρ CIRCULATE FOR CASING 9:30 - 13:00 3.50 DRLSUR 06 D Р LDDS, BHA & DIR. TOOLS 13:00 - 13:30 0.50 **CSGSUR** 12 В Ρ RIG UP TO RUN CASING

### API Well Number: 43047517020000 US ROCKIES REGION **Operation Summary Report** Well: NBU 922-30G1BS RED Spud Date: 6/26/2012 Project: UTAH-UINTAH Site: NBU 922-30H PAD Rig Name No: H&P 298/298, CAPSTAR 310/310 **Event: DRILLING** End Date: 4/13/2013 Start Date: 6/13/2012 UWI: SE/NE/0/9/S/22/E/30/0/0/26/PM/N/1583/E/0/1247/0/0 Active Datum: RKB @4,967.00usft (above Mean Sea Date P/U Time Duration Phase Code MD From Operation Sub Start-End Code (usft) (hr) 13:30 - 15:00 **CSGSUR** Ρ 1.50 12 С RUN 61 JTS 8 5/8. 28# J55 CASING SHOE @ 2721' BAFFLE @ 2675' 15:00 - 15:30 0.50 **CSGSUR** 05 D Р PUMP ON CASING 15:30 - 17:00 1.50 **CSGSUR** 12 В Ρ HELD SAFETY MEETING WITH PRO PETRO CMT **CRFW** MAKE UP CMT HEAD PRESSURE TEST LINES TO 2000 PSI. PUMP 100 BBLS WATER AHEAD FOLLOWED BY 20 **BBL GEL WATER FLUSH** PUMP 250 SX (170 BBLS) LEAD CLASS G CMT @ 11.0 WT & 3.82 YIELD PUMP 200 SX (41BBLS) TAIL CLASS G CMT @ 15.8 WT & 1.15 YIELD DROP PLUG & DISPLACE W/ 157 BBL'S WATER BUMP PLUG W/ 1000 PSI FINAL LIFT =600 PSI CHECK FLOAT FLOAT HELD NO CEMENT TO SURFACE 17:00 - 17:30 0.50 **CSGSUR** Ε Ρ 12 **CUT OFF RISER** HANG CASING RUN 200' OF 1" PIPE DOWN BACKSIDE PUMP 125 SX (25.6 BBLS) 15.8 DOWN GBACKSIDE. CEMENT TO SURFACE **FELL BACK** 17:30 - 19:00 1.50 **CSGSUR** 12 Ε WOC PUMP 100 SX (20.4 BBLS) DOWN BACKSIDE CEMENT TO SURFACE **RIG DWN CEMENTERS** WASH TRUCKS RELEASE RIG @ 19:30 11:00 - 18:00 Р 4/5/2013 7.00 MIRU3 01 В RIG DOWN RIG & MOVE OUT / RW JONES 11 PEOPLE / 2 FORK LIFTS / 1 CRANE / 4 TRUCKS / H& P 19 PERSONELL/ MOUNTIAN WEST 2 TRUCKS 10 PEOPLE/ 7.5 MILE RIG MOVE/ 60% RIGGED DOWN / 205 MOVED OFF OLD LOCATION / CAMPS SET ON LOCATION 18:00 - 0:00 6.00 MIRU3 21 С Р WAIT ON DAY LIGHT TO MOVE RIG 4/6/2013 0:00 - 6:00 6.00 MIRU3 21 С WAIT ON DAY LIGHT TO RIG UP 6:00 - 18:00 12.00 MIRU3 01 В Ρ MIRU / 100 % OFF OLD LOCATION / 30 % RIGGED UP/ JONES TRUCKING 19 PERSONNEL - 8 TRUCKS -2 FORK LIFTS / 1 CRANE / MOUNTIAN WEST 2 PEOPLE / JD FIELDS 3 PEOPLE / H& P 18 PERSONELL / 7.5 MILE MOVE 18:00 - 0:00 6.00 MIRU3 С Р WAIT ON DAY LIGHT TO RIG UP 21 0:00 - 6:00 4/7/2013 6.00 MIRU3 21 С Р WAIT ON DAY LIGHT TO CONTINUE TO RIG UP 6:00 - 20:30 14.50 MIRU3 01 В Р MIRU, DERRICK IN AIR @ 14:45 / JONES TRUCKING 16 PERSONNEL - 6 TRUCKS - 2 FORK LIFTS - 1 CRANE / JD FIELDS 3 PEOPLE / H& P 16 PERSONELL / 7.5 MILE MOVE / RELEASE TRUCKS @ 16:30 CONTINUE TO RIG UP

7/17/2013 7:38:03AM 3

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20:30 - 0:00

- 2:30

0:00

4/8/2013

3.50

2.50

**PRPSPD** 

PRPSPD

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NIPPLE UP BOP'S & EQUIPMENT & MI SWACO / MEANWHILE CHANGE OUT TOP DRIVE

**OUT TOP DRIVE** 

NIPPLE BOPS AND EQUIPMENT / WHILE CHANGING

### API Well Number: 43047517020000 US ROCKIES REGION **Operation Summary Report** Well: NBU 922-30G1BS RED Spud Date: 6/26/2012 Site: NBU 922-30H PAD Project: UTAH-UINTAH Rig Name No: H&P 298/298, CAPSTAR 310/310 **Event: DRILLING** End Date: 4/13/2013 Start Date: 6/13/2012 UWI: SE/NE/0/9/S/22/E/30/0/0/26/PM/N/1583/E/0/1247/0/0 Active Datum: RKB @4,967.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 2:30 - 3:00 PRPSPD Ρ 0.50 07 Α RIG SERVICE 3:00 - 6:00 3.00 Z \*\*\*CHANGE OUT TOP DRIVE\*\*\* **PRPSPD** 08 R 6:00 - 7:00 1.00 **PRPSPD** 23 FIXED SAFETY AUDIT ITEMS 7:00 - 8:00 1.00 **PRPSPD** 01 Ρ RIG UP DRILLING BALES В 8:00 - 11:00 3 00 PRPSPD Р 01 В RIG UP MI SWACO PRESSURE CONTROL AND SMITH ROTATING EQUIPMENT 11:00 - 16:00 5.00 **PRPSPD** 15 Ρ MU TEST ASSY & PRESSURE TEST H&P EQUIPMENT - BLIND RAMS, PIPE RAMS, FLOOR VALVES, IBOP& MANUEL VALVE, KILL LINES& KILL VALVES, BOP WING VALVES, HCR VALVE, INNER & OUTER CHOKE VALVES , CHOKE MANIFOLD TO 250 PSI LOW FOR 5MINUTES & HIGH TEST TO 5000 PSI FOR 10 MINUTES, TEST ANNULAR 250 PSI LOW FOR 5 MINUTES & 2500 PSI FOR 10 MINUTE HIGH TEST / TEST CASING FOR 30 MINUTES @ 1500 PSI 16:00 - 17:30 Ρ TEST MI SWACO PRESSURE CONTROL EQUIPMENT 1 50 PRPSPD 15 Α 17:30 - 18:00 0.50 В **INSTALL WEAR BUSHING** PRPSPD 14 Р 18:00 - 20:00 Ρ 2.00 PRPSPD 06 Α PICK & MAKE UP DIRECTIONAL TOOLS WITH WEATHERFORD, SCRIBE, OREINTATE & TEST SAME 20:00 - 22:00 2.00 Р **PRPSPD** 06 Α TIH WITH DRILL PIPE, DRIFTING EACH JOINT 22:00 - 23:00 1.00 Р PRPSPD 07 В LEVEL DERRICK & PRE SPUD SAFETY INSPECTION 23:00 - 0:00 1.00 **PRPSPD** Ρ CONTINUE TIH, PICKING UP DRILL PIPE TO 1,200' 06 0:00 - 4:00 4/9/2013 4.00 **PRPSPD** 06 Α Р 1200 CONTINUE TO PICK UP DRILL PIPE TRIPPING HOLE TO 2.615 4:00 - 4:30 0.50 **PRPSPD** 14 В Ρ 2615 INSTALL SMITH ROTATING HEAD / FILL PIPE 4:30 - 5:30 1.00 DRLPRC F Р 2615 02 DRILL CEMENT & SHOE TRACK FROM 2,615' TO 2,743' CLEAN OUT RATHOLE TO 2,782' 5:30 - 11:00 5.50 **DRLPRC** 02 В Р 2782 DRILL /SLIDE / SURVEY/ F/ 2,782' TO 3,649' = 867'=157.63 FPH WOB 18,000-23,000 TOP DRIVE RPM 60-75 MUD MOTOR RPM 123 PUMPS 130 SPM= 585 GPM PUMP PRESSURE ON/OFF BTM 2000/ 1630 TORQUE ON/OFF BTM 7,000/ 4,000 PICK UP WT 135,000 SLACK OFF WT 89,000 **ROT WT 102.000** SLIDE 61' IN 45 MIN 7.04% OF FOOTAGE DRILLED, 12.05 %OF HRS DRILLED NO FLUID LOST PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.5 VIS 26 **NOV-D WATER** SWACO OFF LINE 11:00 - 11:30 0.50 DRLPRC 07 Α Ρ 3649 RIG SERVICE @ 3,649'

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				U	3 KUU	KIES RE	GION	
				Opera	tion S	umma	ry Report	
ell: NBU 922-30	G1BS RED						Spud Date: 6/2	26/2012
oject: UTAH-UI	NTAH		Site: NBU	922-30H	l PAD			Rig Name No: H&P 298/298, CAPSTAR 310/310
ent: DRILLING			Start Date	e: 6/13/20	)12			End Date: 4/13/2013
tive Datum: RK vel)	(B @4,967.00usft (a	bove Mean S	ea	UWI: SE	E/NE/0/9/	S/22/E/30	/0/0/26/PM/N/15	83/E/0/1247/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
4/10/2013	0:00 - 6:00	6.00	DRLPRV	02	В	P	5444	DRILL /SLIDE / SURVEY/ F/ 5,444' TO 6,318' = 874' = 145.66 FPH  WOB 18,000-23,000  TOP DRIVE RPM 60-75  MUD MOTOR RPM 123  PUMPS 130 SPM= 585 GPM  PUMP PRESSURE ON/OFF BTM 2150/1920  TORQUE ON/OFF BTM 10,000/ 4,000  PICK UP WT 165,000  SLACK OFF WT 134,000  ROT WT 114,000  NO SLIDES  35 BBL FLUID LOST  PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER  MUD WT 8.5 VIS 26  NOV-D WATER  SWACO OFF LINE
	6:00 - 11:00	5.00	DRLPRV	02	В	P	6318	DRILL /SLIDE / SURVEY/ F/ 6,318' TO 6,861' = 543' = 108.6 FPH  WOB 18,000-23,000  TOP DRIVE RPM 60-75  MUD MOTOR RPM 123  PUMPS 130 SPM= 585 GPM  PUMP PRESSURE ON/OFF BTM 2,230/1,680  TORQUE ON/OFF BTM 9,000/ 6,000  PICK UP WT 181,000  SLACK OFF WT 120,000  ROT WT 144,000  SLIDE 40' IN 45 MIN 8.46% OF FOOTAGE DRILLED, 15 %OF HRS DRILLED  22 BBL FLUID LOST  PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER  MUD WT 8.4 VIS 26  NOV-D WATER

## API Well Number: 43047517020000 US ROCKIES REGION **Operation Summary Report** Spud Date: 6/26/2012 Well: NBU 922-30G1BS RED Project: UTAH-UINTAH Site: NBU 922-30H PAD Rig Name No: H&P 298/298, CAPSTAR 310/310 **Event: DRILLING** End Date: 4/13/2013 Start Date: 6/13/2012 UWI: SE/NE/0/9/S/22/E/30/0/0/26/PM/N/1583/E/0/1247/0/0 Active Datum: RKB @4,967.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 11:30 - 13:00 1.50 **DRLPRV** 02 В Ρ 6861 DRILL /SLIDE / SURVEY/ F/ 6.861' TO 6.958 = 97' = 65 FPH WOB 18,000-23,000 TOP DRIVE RPM 60-75 MUD MOTOR RPM 123 PUMPS 130 SPM= 585 GPM PUMP PRESSURE ON/OFF BTM 2,230/1,680 TORQUE ON/OFF BTM 9,000/ 6,000 PICK UP WT 181,000 SLACK OFF WT 120,000 ROT WT 144,000 SLIDE 18' IN 30 MIN 18.5% OF FOOTAGE DRILLED, 33%OF HRS DRILLED 12 BBL FLUID LOST PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.5 VIS 26 NOV-D WATER SWACO OFF LINE 13:00 - 14:30 1.50 **DRLPRV** 80 Ζ 6958 \*\*\*NO POWER TO DRAWWORKS ON CONNECTION, TROUBLE SHOOT, WIRING & ENCODER ON DRAWWORKS, FOUND BAD PINS ON DRAWWORKS, PLUG REPLACED\*\*\* 14:30 - 0:00 9.50 **DRLPRV** 02 В 6958 DRILL /SLIDE / SURVEY/ F/ 6,958' TO 7,625 = 667' = 70.2 FPH WOB 18.000-24.000 **TOP DRIVE RPM 60-75** MUD MOTOR RPM 123 PUMPS 130 SPM= 585 GPM PUMP PRESSURE ON/OFF BTM 2,230/1,680 TORQUE ON/OFF BTM 9,000/ 6,000 PICK UP WT 181 000 SLACK OFF WT 120 000 **ROT WT 144 000** SLIDE 20' IN 35 MIN 8.46% OF FOOTAGE DRILLED, 15 %OF HRS DRILLED 54 BBL FLUID LOST PUMPING 5-10 BBL SWEEPS EVERY STAND.W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.5 VIS 26 **NOV-D WATER** SWACO OFF LINE

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### **US ROCKIES REGION Operation Summary Report** Well: NBU 922-30G1BS RED Spud Date: 6/26/2012 Site: NBU 922-30H PAD Project: UTAH-UINTAH Rig Name No: H&P 298/298, CAPSTAR 310/310 **Event: DRILLING** End Date: 4/13/2013 Start Date: 6/13/2012 UWI: SE/NE/0/9/S/22/E/30/0/0/26/PM/N/1583/E/0/1247/0/0 Active Datum: RKB @4,967.00usft (above Mean Sea P/U Date Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 15:30 - 16:30 1.00 **DRLPRV** Ρ 8939 07 Α DAILY RIG SERVICE. CHANGE SUCTION VALVE IN MUD PUMP 16:30 - 0:00 7.50 DRLPRV Ρ 9453 02 В DRILL SURVEY/ F/ 8,939' TO 9,453 =514' = 68.5 FPH WOB 18,000-26,000 TOP DRIVE RPM 50-75 MUD MOTOR RPM 104 PUMPS 110 SPM= 495 GPM PUMP PRESSURE ON/OFF BTM 2,550/2,200 TORQUE ON/OFF BTM 14,000/ 10,000 PICK UP WT 245,000 SLACK OFF WT 170,000 ROT WT 196,000 0 BBL FLUID LOST DISPLACE HOLE W/200 BBLS 10.6 PPG & CIRC AROUND, DISPLACE W/ 200 BBLS 10,6 MUD / RAISE MUD WT TO 10.8 PPG NO FLARE **NOV-OFF LINE** SWACO OFF LINE 4/12/2013 - 1:30 DRLPRV 9453 1.50 02 В DRILL SURVEY F/ 9,453' TO 9,555 TD =70' = 46.6 FPH (NOTE 31' CORRECTION IN PIPE) TALLY WOB 18,000-26,000 **TOP DRIVE RPM 50-75** MUD MOTOR RPM 104 PUMPS 110 SPM= 495 GPM PUMP PRESSURE ON/OFF BTM 2,550/2,200 TORQUE ON/OFF BTM 14,000/ 10,000 PICK UP WT 245.000 SLACK OFF WT 170 000 ROT WT 196,000 0 BBL FLUID LOST RAISE MUD WT TO 10.8 PPG NO FLARE **NOV-OFF LINE** SWACO OFF LINE 1:30 - 3:00 1.50 **DRLPRV** 05 С Ρ CIRC AND COND HOLE F/ CASING 3:00 - 4:30 1.50 **DRLPRV** 06 Ε Р 15 STAND WIPER TRIP TO 8,200' HOLE GOOD - 6:00 4:30 1.50 **DRLPRV** В Р 05 CIRC & COND 1/10 MUD CUT ON BOTTOMS UP 8-10 ' FLARE MUD WT TO 11,0 PPG 6:00 - 13:00 7.00 **DRLPRV** 06 D Р TRIP OUT FOR CASING FLOW CKECK @ CASING SHOE. (NO TIGHT SPOTS), PULL TO BHA, PULL ROTATING HEAD ,STAND BACK DIRECTIONAL TOOLS, BREAK BIT, LAY DOWN MUD MOTOR 13:00 - 14:00 1.00 **CSGPRO** 14 В Р RULL WEAR BUSHING, CHANGE OUT DRILLING BAILS TO CASING BAILS 14:00 - 15:30 1.50 **CSGPRO** Р CTJSA RIG UP KIMZEY CASING EQUIP. 12 Α 15:30 - 0:00 8.50 **CSGPRO** 12 С Ρ MAKE UP & TEST FLOAT EQUIP, RUN 114 JTS I-80 11.6# LTC 4.5 CASING +1 CROSSOVER LTC/ DQX 113 JTS I-80 11.6# DQX 4.5 CASING+ RELATED TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS / LANDING CASING MANDREL IN BOWL W/98,000, @ 9,519 FOR CIRC & CEMENTING / SHOE @9,519 / FC @ 9,498 / MV MKR @ 7,383 DV TOOL@4,987 X/0 @ 4,984 ,RD SAME

API Well Number: 43047517020000

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7/17/2013 7:38:03AM 10

TO NBU 922-30H3DS @12:00 4/13/2013

## General

## **Customer Information** <del>[</del>:

Company	US ROCKIES REGION
Representative	
Address	

## Well/Wellbore Information 1.2

				AP:
			US ROCKIES REGION	
				11   
General				Num
Customer Information				ber:
Company	US ROCKIES REGION			4
Representative				30
Address				)4
Well/Wellbore Information	tion			7517(
Well	NBU 922-30G1BS RED	Wellbore No.	ᆼ	)2(
Well Name	NBU 922-30G1BS	Wellbore Name	NBU 922-30G1BS	00
Report No.	Į.	Report Date	6/17/2013	00
Project	UTAH-UINTAH	Site	NBU 922-30H PAD	)
Rig Name/No.		Event	COMPLETION	
Start Date	5/17/2013	End Date	6/21/2013	
Spud Date	6/26/2012	Active Datum	RKB @4,967.00usft (above Mean Sea Level)	
UWI	SE/NE/0/9/S/22/E/30/0/0/26/PM/N/1583/E/0/1247/0/0			

## General ..

Contractor	Job Method	Supervisor	
Perforated Assembly	Conveyed Method		

Summary

1.5

## Initial Conditions 1.4

Fluid Type	Fluid Density	Gross Interval	6,106.0 (usft)-9,398.0 (usft Start Date/Time	Start Date/Time	6/17/2013 12:00AM
Surface Press	Estimate Res Press	No. of Intervals	65	65 End Date/Time	6/17/2013 12:00AM
TVD Fluid Top	Fluid Head	Total Shots	255	255 Net Perforation Interval	78.00 (usft)
Hydrostatic Press	Press Difference	Avg Shot Density	3.27 (shot/ft)	3.27 (shot/ft) Final Surface Pressure	
Balance Cond NEUTRAL				Final Press Date	

## Intervals

## Perforated Interval 2.1

July 12, 2013 at 12:41 pm

Misrun	
Reason	23.00 PRODUCTIO N
Charge Weight (gram)	23.00
Phasing Charge Desc /Charge (°) Manufacturer	
Phasing (°)	00.06
Carr Size (in)	3.375
Carr Type /Stage No	EXP/
Diamete r (in)	0.360 EXP/
Misfires/ Add. Shot	
Shot Density (shot/ft)	4.00
CCL-T   MD Top   MD Base   Shot   Stot   S	3,106.0 6,109.0
MD Top (usft)	6,106.0
CCL-T S (usff)	
(Just)	
Formation/ Reservoir	3/17/2013 WASATCH/ 2:00AM
Date	6/17/2013 12:00AM

Perforated Interval (Continued) 2.1

I pt	Formation/ Reservoir	WASATCH/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/																
Perforated Interval (Continued)	ir (usft)																					
(per	S S																					
	MD Top (usft)	6,282.0	6,538.0	6,553.0	6,580.0	6,610.0	6,682.0	6,730.0	6,742.0	6,760.0	6,776.0	6,794.0	6,964.0	7,034.0	7,144.0	7,160.0	7,180.0	7,198.0	7,444.0	7,464.0	7,595.0	7,610.0
	MD Base (usft)	6,285.0	6,539.0	6,554.0	6,582.0	6,611.0	6,683.0	6,731.0	6,743.0	6,761.0	6,778.0	6,796.0	6,965.0	7,035.0	7,145.0	7,161.0	7,181.0	7,199.0	7,445.0	7,465.0	7,596.0	7,611.0
	Shot Density	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	3.00	3.00	3.00	3.00
	Misfires/ Add. Shot																					
	Diamete r	<u> </u>	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360 EXP/	0.360	0.360	0.360	0.360 EXP/	0.360 EXP/
	Carr Type /Stage No	EXP/																				
	Carr Size	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375
	Phasing (°)	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	120.00	120.00	90.00	90.00	90.00	90.00	90.00	90.00	120.00	120.00	120.00	120.00
	Charge Desc /Charge Manufacturer																					
<b>-</b>	Charge Weight	23.00 F																				
US ROCKIES REGION	Reason	23.00 PRODUCTIO N																				
REGION	Misrun																					

| 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 | 12:00 RECEIVED: Aug. 29, 2013

July 12, 2013 at 12:41 pm

		:											US ROCKIES REGION	API Well
	Perforated Interval (Continued)	Continu	ed)			H								
	Formation/ Reservoir	(nsft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Misfires/ Density Add. Shot (shot/ft)	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
	MESAVERDE/			7,626.0	7,627.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	: 4
6/17/2013 12:00AM	MESAVERDE/			7,636.0	7,637.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	1304
6/17/2013 12:00AM	MESAVERDE/			7,656.0	7,657.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	175.
6/17/2013 12:00AM	MESAVERDE/			7,710.0	7,711.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	170
6/17/2013 12:00AM	MESAVERDE/			7,751.0	7,752.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	200
6/17/2013 12:00AM	MESAVERDE/			7,824.0	7,825.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	00
6/17/2013 12:00AM	MESAVERDE/			7,838.0	7,839.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			7,884.0	7,885.0	3.00	0.360 EXP/	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			7,906.0	7,908.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			7,964.0	7,965.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			7,976.0	7,977.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			7,995.0	7,996.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			8,130.0	8,131.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			8,150.0	8,151.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			8,170.0	8,172.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			8,454.0	8,455.0	3.00	0.360 EXP/	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			8,466.0	8,467.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			8,478.0	8,479.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			8,490.0	8,491.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	
6/17/2013 12:00AM	MESAVERDE/			8,510.0	8,511.0	3.00	0.360	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO	
6/17/2013 12:00AM	MESAVERDE/			8,520.0	8,521.0	3.00	0.360 EXP/	EXP/	3.375	120.00		23.00	23.00 PRODUCTIO N	

July 12, 2013 at 12:41 pm

Perforated Interval (Continued)

	Numbe	r: ·	4304	475	170	200	00															
REGION	Misrun																					
US ROCKIES REGION	Reason	23.00 PRODUCTIO	23.00 PRODUCTIO	23.00 PRODUCTIO N	23.00 PRODUCTIO	23.00 PRODUCTIO N																
	Charge Weight	(gram) 23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
	Charge Desc /Charge Manufacturer																					
	Phasing (*)	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00
	Carr	(in) 3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375
	Carr Type /Stage No	EXP/	EXP/	EXP/	EXP/	EXP/	EXP/	EXP/	0.360 EXP/	EXP/	EXP/	EXP/	EXP/	EXP/	EXP/	EXP/	EXP/	EXP/	EXP/	EXP/	0.360 EXP/	0.360 EXP/
	Diamete	(in) 0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360
	Misfires/ Add. Shot		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(shot/ft)	0 3.00	0 3.00	0 3.00	0 3.00	3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00	0 3.00
	MD Base (usft)	8,537.	8,550.0	8,650.0	8,675.0	8,737.0	8,759.0	8,776.0	8,805.0	8,831.0	8,851.0	9,038.0	9,057.0	9,084.0	9,095.0	9,110.0	9,161.0	9,179.0	9,275.0	9,281.0	9,308.0	9,367.0
	MD Top (usft)	8,536.0	8,549.0	8,649.0	8,674.0	8,736.0	8,758.0	8,775.0	8,804.0	8,830.0	8,850.0	9,036.0	9,056.0	9,082.0	9,094.0	9,108.0	9,160.0	9,178.0	9,274.0	9,280.0	9,307.0	9,366.0
1	CCL-T	(nsft)																				
; ;	CONTINUE (18th)																					
	Formation/ CCL@ C	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/	MESAVERDE/
	Date	6/17/2013	6/17/2013 12:00AM																			

July 12, 2013 at 12:41 pm

RECEIVED: Aug. 29, 2013

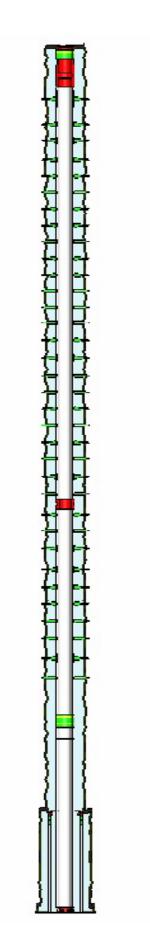
API	Well	Number:	4304751702000
	Z	_	

We:	11	Nu	mk	эe	r	:	4
REGION			Misrun				
US ROCKIES REGION A			Reason			23.00 PRODUCTIO	z
			Charge	Weight	(gram)	23.00	
			Phasing   Charge Desc /Charge	Manufacturer			
			Phasing	•		3.375 120.00	
			Carr	Size	(ii)	3.375	
			Diamete   Carr Type /Stage No			/AX	
			Diamete	_	(ii)	0.360 EXP/	
			Misfires/	Add. Shot			
			Shot	Density	(shot/ft)	3.00	
			CCL-T MDTop MD Base Shot	(nstt)		9,396.0 9,398.0 3.00	
			MD Top	(nstt)		9,396.0	
	(20)		CCL-T	ဟ	(nstt)		
	, continu		@Toc	(JJSN)			
	(bounding) Journal Industria	eriorateo interval	Formation/	Reservoir		6/17/2013 MESAVERDE/	
	7	7.7	Date			6/17/2013	12:00AM

3.1 Wellbore Schematic

Plots

က



July 12, 2013 at 12:41 pm

				U	S ROC	KIES RI	EGION	
				Opera	tion S	Summa	ry Report	
Well: NBU 922-3	30G1BS RED						Spud Date: 6/2	26/2012
Project: UTAH-U	JINTAH		Site: NBL	J 922-30H	I PAD			Rig Name No: MILES-GRAY 1/1, SWABBCO 6/6
Event: COMPLE	TION		Start Date	e: 5/17/20	)13			End Date: 6/21/2013
Active Datum: R Level)	KB @4,967.00usft (a	above Mean S	Sea	UWI: SE	E/NE/0/9/	S/22/E/30	/0/0/26/PM/N/15	83/E/0/1247/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
5/17/2013	7:00 - 7:15	0.25	SUBSPR	48		Р	(33.1)	HSM-JSA
	7:15 - 15:30	8.25	SUBSPR	31	I	Р		MOVE RIG & EQUIP FROM 920-20D, LOCATE 4 ANCHOR BLOCKS & DEL TO LOC, MIRU SPOT EQUIP, NDWH, NUBOP, PU 3 7/8" BIT RIH W/ 152 JTS TBG TAG CMT @ 4,825', SWI, SDFWE.
5/20/2013	7:00 - 7:15	0.25	SUBSPR	48		Р		HSM-JSA
	7:15 - 18:00	10.75	SUBSPR	44	D	Р		RU PWR SWVL, BRK REV, CIRC, C/O 159' CMT TAG DV TOOL @ 4,984', D/O DV TOOL, CIRC CLN, RIH TAG FLOAT COLLAR @ 9,496', CIRC BTMS UP, RD PWR SWVL, POOH LD 299 JTS TBG,RD FLOOR & TBG EQUIP, NDBOP, NUWH, SWI, SDFN.
5/30/2013	-							
6/5/2013	8:00 - 9:00	1.00	SUBSPR	33	С	P		FILL SURFACE CSG. MIRU CAMERON QUICK TEST. PRESSURE TEST CSG & FRAC VALVES 1ST PSI TEST T/ 7000 PSI. HELD FOR 15 MIN LOST 46 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI.  PRESSURE TEST 8 5/8 X 4 1/2 TO 522 PSI HELD FOR 5 MIN LOST -364 PSI,BLED PSI OFF, REINSTALLED POP
								OFF  FILLED SURFACE WITH 5 BBLS , NO PRESSURE ON SURFACE CSG
6/14/2013	7:00 - 7:15	0.25	SUBSPR	48		Р		HSM, RIGGING UP / CHECKING VALVES
6/17/2013	6:45 - 7:00	0.25	FRAC	48		Р		HSM, REVIEW FRAC PROCEDURE
	7:00 - 8:00	1.00	FRAC	46	E	Z		PROBLEM WITH STARTERS ON PUMPS
	8:00 - 16:00	8.00	FRAC	36	В	Р		REFER TO STIMULATION PJR FOR FLUID, SAND AND CHEMICAL VOLUMES, ALL STAGES WERE PERFORATED ACCORDING TO PERF RECORD IN OPEN WELLS, ALL STAGES WERE STIMULATED TO VENDOR POST JOB REPORT. ALL PLUGS ARE HALIBURTON 8K CBPS
								FRAC STG #1] WHP=1597#, BRK DN PERFS=3358#, @=4.8 BPM, INTIAL ISIP=2472#, FG=.71, FINAL ISIP=2928#, FG=.75,
								SET PLUG & PERFORATE STG #2
								FRAC STG #2] WHP=1371#, BRK DN PERFS=4301#, @=5.1 BPM, INTIAL ISIP=2151#, FG=.68, FINAL ISIP=2961#, FG=.77,
								SET PLUG & PERFORATE STG #3 SWIFN

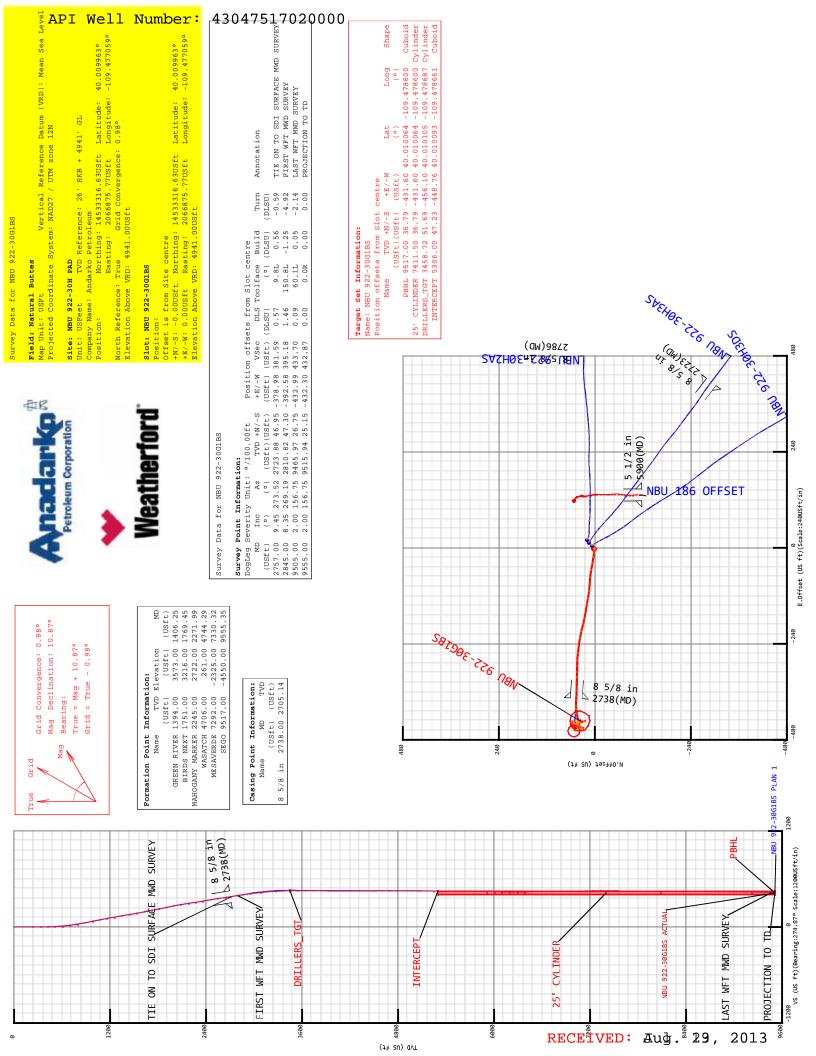
API WE	<del>ll Numbe</del> r	• 4304	751702			KIES RE	EGION	
				Opera	tion S	Summa	ry Report	
Well: NBU 922-3	0G1BS RED						Spud Date: 6/2	26/2012
Project: UTAH-U	INTAH		Site: NBI	J 922-30H	PAD			Rig Name No: MILES-GRAY 1/1, SWABBCO 6/6
Event: COMPLE	TION		Start Dat	te: 5/17/20	)13			End Date: 6/21/2013
Active Datum: RI Level)	KB @4,967.00usft (a	above Mean Se	ea	UWI: SE	E/NE/0/9/	'S/22/E/30	/0/0/26/PM/N/158	83/E/0/1247/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
6/18/2013	7:00 - 15:45	8.75	FRAC	36	В	P		FRAC STG #3] WHP=1188#, BRK DN PERFS=2786#, @=4.9 BPM, INTIAL ISIP=1785#, FG=.64, FINAL ISIP=2428#, FG=.72,  SET PLUG & PERFORATE STG #4  FRAC STG #4] WHP=2203#, BRK DN PERFS=3736#, @=5.1 BPM, INTIAL ISIP=2344#, FG=.71, FINAL ISIP=2537#, FG=.74,  SET PLUG PERFORATE STG #5  FRAC STG #5] WHP=845#, BRK DN PERFS=2535#, @=5.1 BPM, INTIAL ISIP=1376#, FG=.61, FINAL ISIP=2618#, FG=.76,  SET PLUG AND PERFORATE STG #6  FRAC STG #6] WHP=1630#, BRK DN PERFS=2187#, @=4.7 BPM, INTIAL ISIP=1707#, FG=.66, FINAL ISIP=2371#, FG=74.,  SET PLUG AND PERFORATE STG #7  SWIFN
	15:45 - 17:00	1.25	FRAC	46	E	Z		SWIFN SHUTDOWN FOR DAY DUE TO PUMP FLUID END AND SUCTION SIDE OF MISSEL

RECEIVED: Aug. 29, 2013

						KIES RE		
				Opera	tion S	Summa	ry Report	
Vell: NBU 922-3	0G1BS RED						Spud Date: 6/2	26/2012
roject: UTAH-U	INTAH		Site: NBU	J 922-30F	I PAD			Rig Name No: MILES-GRAY 1/1, SWABBCO 6/6
vent: COMPLE	TION		Start Dat	e: 5/17/20	13			End Date: 6/21/2013
ctive Datum: R	KB @4,967.00usft (a	bove Mean S	ea	UWI: SE	E/NE/0/9/	S/22/E/30	/0/0/26/PM/N/15	83/E/0/1247/0/0
evel)								
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
6/19/2013	6:30 - 17:00	10.50	FRAC	36	В	Р		FRAC STG #7] WHP=1290#, BRK DN PERFS=2857#, @=5.0 BPM, INTIAL ISIP=1842#, FG=.68, FINAL ISIP=2237#, FG=.73,
								SET PLUUG AND PERFORATE STG #8
								FRAC STG #8] WHP=233#, BRK DN PERFS=2100#, @=5.4 BPM, INTIAL ISIP=1441#, FG=.64, FINAL ISIP=2171#, FG=.75,
								SET PLUG AND PERFORATE STG #9
								FRAC STG #9] WHP=1548#, BRK DN PERFS=2243#, @=4.9 BPM, INTIAL ISIP=1744#, FG=.70, FINAL ISIP=1900#, FG=.72,
								SET PLUG AND PERFORATE STG #10
								FRAC STG #10] WHP=1518#, BRK DN PERFS=2141#, @=4.7 BPM, INTIAL ISIP=1574#, FG=.68, FINAL ISIP=1645#, FG=69.,
								SET PLUG AND PERFORATE STG #11
								FRAC STG #11] WHP=845#, BRK DN PERFS=1378#, @=4.8 BPM, INTIAL ISIP=943#, FG=59., FINAL ISIP=1174#, FG=63.,
								SET TOP KILL
								TOTAL BBLS=11718 TOTAL SAND=272725
6/20/2013	7:00 - 7:30	0.50	DRLOUT	48		Р		MOVING
	7:30 - 17:00	9.50	DRLOUT	31	I	Р		MIRU, SET CEMENT ANCHORS, NDWH, NU BOP'S, PU POBS ASSY, TIH TBG 150 JTS, EOT 4745', SWIFN
6/21/2013	7:00 - 7:30	0.50	DRLOUT	48		Р		MILLING PLUGS

				On	stiess C		m. Denort	
				Opera	ation S	umma	ry Report	
/ell: NBU 922	-30G1BS RED						Spud Date: 6/2	26/2012
roject: UTAH-	UINTAH		Site: NBL	J 922-30H	H PAD			Rig Name No: MILES-GRAY 1/1, SWABBCO 6/6
vent: COMPL	ETION		Start Date	e: 5/17/20	013			End Date: 6/21/2013
	RKB @4,967.00usft (ab	ove Mean S	ea	UWI: SI	E/NE/0/9/	S/22/E/30	/0/0/26/PM/N/15	83/E/0/1247/0/0
evel)								
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:30 - 17:00	9.50	DRLOUT	44	C	P		TIH 191 JTS, TAG KILL PLUG, MILL 11 CBP'S, 288 JTS, 9140',C/O 0' SAND,TO PBTD 9,398', 296 JTS, POOH TO 8,991.50', 283 JTS, LAND TBG, ND BOP'S, NUWH, POBS, 2700#, PRESSURE TEST FLOW LINE 3000#, RDMO  TURNED TO PROD 5:00 PM  PLUG# 1 6056' 20' SAND 5 MIN 0# KICK PLUG# 2 6315' 25' SAND 5 MIN 0# KICK PLUG# 3 6713' 30' SAND 5 MIN 0# KICK PLUG# 4 6826' 30' SAND 5 MIN 0# KICK PLUG# 5 7229' 15' SAND 5 MIN 0# KICK PLUG# 6 7687' 25' SAND 5 MIN 0# KICK PLUG# 7 7938' 25' SAND 5 MIN 100# KICK PLUG# 8 8202' 25' SAND 5 MIN 150# KICK PLUG# 9 8580' 30' SAND 5 MIN 150# KICK PLUG# 10 8881' 30' SAND 5 MIN 200# KICK PLUG# 11 9140' 30' SAND 5 MIN 200# KICK PLUG# 11 9140' 30' SAND 5 MIN 200# KICK PLUG# 11 1 9140' 30' SAND 5 MIN 200# KICK  PBTD 9,496' BTM PERF 9398'  TBG 150 JTS J-55 4750.57' BTM TBG 133 JTS L-80 4211.93' TOP KB 26.00' HANGER 4.125" .83' SN 1.875" 2.20' EOT 8,991.50' NOTE: SHORT JT AT 4205.93'  FRAC WTR 11,718 BBLS RCVD 3,600 BBLS
	17:00 - 17:00	0.00	DRLOUT	50				LTR 8,118 BBLS  WELL TURNED TO SALES@ 1700 HR ON 6/21/2013  800 MCFD, 1920 BWPD, FCP 1750#, FTP 1730#, 20/64" CK.

RECEIVED: Aug. 29, 2013



# FINAL SURVEYS



5D Survey Report

## **Andarko Petroleum**

NBU 922-30H PAD Natural Buttes Field Name: Site Name:

Well Name:

Survey:

NBU 922-30G1BS

Definitive Survey

Weatherford

5D 7.5.3: 16 April 2013, 18:13:02 UTC

Weatherford International Limited

 $\sim$ 

## Weatherford

5D Survey Report



# Surveys for the NBU 922-30G1BS

Convergence Angle: 0.98	Latitude: 40.009963	Longitude: -109.477059				
North Reference: True	Northing: 14533316.63 US ft	Easting: 2066875.77 US ft	+ 4941' GL	·		
Units: US ft		Position	Site TVD Reference: 26' RKB	Elevation above:4941.00 US ft	Comment:	
		Site Name		UDG 922-300 LAN		

	9963	9.477059								<b>Az :</b> 274.87°
Position (Offsets relative to Site Centre)	t <b>Latitude :</b> 40.009963	Longitude: -109.477059				UWI:	Comment :	Closure Azimuth: 273.329°		+E / -W: 0.00 US ft
Position (	Northing:14533316.63 USft	Easting:2066875.77 USft	Ground Elevation	.00 US ft			: 26.00 US ft JS ft	.03 US ft	ion of Origin Relative to Slot)	+N / -S: 0.00 US ft
	+N / -S: -0.00 US ft	+E / -W: 0.00 US ft	Slot TVD Reference: Ground Elevation	Elevation above: 4941.00 US ft	Comment :	Type: Main well	Rig Height Drill Floor: 26.00 US ft Relative to: 4967.00 US ft	Closure Distance: 433.03 US ft	Vertical Section (Position of Or	
		Slot Name	0 at 000 cc0 Hala	NDO 922-3061B3			Me N I e M		NBU 922-30G1BS	

	<b>DID:</b> 0.00 <sup>2</sup>
Company:	2
	Decilipation: 0.005
Comment:	Field Strength: SOCOO.O DI
Survey Tool:	Date: 21/Mar/2013
Survey Name :Definitive Survey  Date : 21/Mar/2013  Magnetic Model	Model Name: Detault

Weatherford International Limited

5D Survey Report

						Comment																													TIE ON TO SDI SURFACE MWD SURVEY	FIRST WFT MWD SURVEY	
	Source Survey	SURFACE MWD	WFT MWD			VS (US ft)	00.0	0.05	0.44	1.88	5.34	12.03	22.64	37.09	54.33	72.41	90.00	107.46	124.52	140.85	157.79	174.29	191.01	208.61	226.25	244.67	263.15	280.79	296.35	310.40	324.73	339.84	355.26	370.34	381.59	395.18	403.95
	Source	SURFA	WFT	l		CL (US ft)	00.0	248.00	91.00	90.00	94.00	94.00	94.00	94.00	95.00	94.00	93.00	00'96	00'96	93.00	94.00	92.00	93.00	94.00	93.00	95.00	94.00	94.00	94.00	94.00	94.00	93.00	95.00	96.00	70.00	88.00	62.00
				l		DLS (°/100 US ft)	00.00	0.04	0.61	0.99	1.62	2.58	2.61	2.46	1.06	1.24	0.84	0.47	0.84	0.10	0.53	0.67	1.09	0.40	09.0	0.74	0.25	1.07	1.89	0.19	0.57	0.87	1.03	0.78	0.57	1.46	0.68
	(us tt)	.00	00.5	ı		Longitude (°)	-109.477059	-109.477059	-109.477061	-109.477066	-109.477078	-109.477101	-109.477139	-109.477190	-109.477251	-109.477315	-109.477378	-109.477440	-109.477500	-109.477558	-109.477618	-109.477676	-109.477735	-109.477796	-109.477858	-109.477924	-109.477989	-109.478052	-109.478107	-109,478158	-109.478209	-109.478263	-109.478318	-109.478372	-109.478412	-109.478461	-109.478492
	End MD (us ft)	2757.00	9555.00	ı		Latitude (°)	40.009963	40.009962	40.009963	40.009965	40.009967	40.009970	40.009973	40.009980	40.009988	40.009995	40.009999	40.010003	40.010010	40.010018	40.010025	40.010033	40.010043	40.010055	40.010065	40.010073	40.010079	40.010084	40.010085	40.010086	40.010086	40.010088	40.010089	40.010090	40.010092	40.010093	40.010092
				ı		E.Offset (US ft)	00:00	-0.07	-0.45	-1.83	-5.23	-11.86	-22.40	-36.70	-53.74	-71.67	-89.21	-106.61	-123.53	-139.67	-156.43	-172.75	-189.21	-206.51	-223.90	-242.15	-260.50	-278.06	-293.63	-307.72	-322.09	-337.20	-352.64	-367.74	-378.98	-392.58	-401.40
	art MD (usft)	0.00	2757.00	ı		N.Offset (US.ft.)	0.00	-0.18	-0.03	09.0	1.53	2.44	3.79	60.9	9.22	11.78	13.14	14.58	16.96	19.87	22.72	25.55	29.29	33.58	37.18	40.00	42.26	43.93	44.58	44.65	44.76	45.38	45.81	46.22	46.95	47.30	47.03
	Start			ı	Drill Floor )	TVD (US ft)	0.00	248.00	339.00	428.98	522.92	616.67	710.06	802.93	896.34	988.57	1079.89	1174.29	1268.76	1360.30	1452.75	1543.25	1634.70	1727.00	1818.28	1911.47	2003.64	2095.96	2188.66	2281.60	2374.49	2466.25	2559.99	2654.79	2723.88	2810.82	2872.19
				rvature	centre, TVD relative to Drill Floor)	Az (°)	0.00	199.99	301.85	291.66	282.17	275.40	278.59	279.62	281.11	275.22	273.55	275.93	280.14	280.32	279.00	280.76	284.72	283.13	280.23	277.42	276.63	274.08	270.39	270.21	270.65	273.90	269.16	273.93	273.52	269.19	267.25
anges	Name	MWC	MWE	ısing minimum cu			0.00	0.09	0.53	1.41	2.90	5.28	7.71	10.02	10.99	11.26	10.55	10.41	10.11	10.20	10.64	10.11	10.82	11.04	10.99	11.43	11.26	10.38	8.71	8.53	90.6	9.67	9.06	90.6	9.45	8.35	8.03
Survey Tool Ranges				Well path created using minimum curvature	Survey Points (Relative to	ME (US ft)	00.00	248.00	339.00	429.00	523.00	617.00	711.00	805.00	00.006	994.00	1087.00	1183.00	1279.00	1372.00	1466.00	1558.00	1651.00	1745.00	1838.00	1933.00	2027.00	2121.00	2215.00	2309.00	2403.00	2496.00	2591.00	2687.00	2757.00	2845.00	2907.00

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5D 7.5.3: 16 April 2013, 18:13:02 UTC

446.18
95.00
0.31
-109.478646
40.010073
-444.37
40.15
6772.81
269.87
1.19
6811.00

5D 7.5.3: 16 April 2013, 18:13:02 UTC

Comment																																								
VS (US ft)	416.16	430.56	439.69	445.94	450.40	453.05	453.67	454.41	454.05	452.33	450.77	450.12	450.24	450.23	450.40	450.69	450.77	451.41	452.73	453.25	452.82	452.13	451.25	450.14	448.92	447.36	445.46	443.68	442.05	440.45	438.85	437.40	436.02	434.69	433.04	432.78	435.19	438.47	441.46	444.00
CL (US ft)	94.00	126.00	95.00	94.00	94.00	94.00	95.00	94.00	95.00	94.00	94.00	95.00	95.00	94.00	95.00	94.00	94.00	95.00	95.00	94.00	95.00	94.00	95.00	94.00	94.00	95.00	94.00	95.00	94.00	94.00	95.00	94.00	95.00	94.00	95.00	94.00	95.00	94.00	95.00	94.00
DLS (°/100 US ft)	1.34	0.70	1.76	2.31	0.19	2.49	0:30	1.76	1.98	0.41	0.48	1.86	1.12	1.94	1.01	0.62	1.17	1.05	66.0	1.11	0.27	0.29	0.28	0.42	0.18	2.17	0.56	1.09	0.42	0.16	0.25	0:30	0.36	0.28	0.53	2.34	2.09	0.41	0.50	0.36
Longitude (°)	-109.478536	-109.478589	-109.478622	-109.478645	-109.478661	-109.478671	-109.478675	-109.478678	-109.478677	-109.478670	-109.478665	-109.478663	-109,478663	-109.478663	-109.478663	-109.478663	-109.478663	-109.478665	-109.478669	-109.478671	-109.478669	-109.478667	-109.478663	-109,478660	-109.478656	-109.478650	-109.478643	-109.478636	-109.478630	-109.478624	-109.478618	-109.478613	-109.478609	-109.478605	-109.478599	-109.478599	-109.478607	-109.478619	-109.478629	-109.478638
Latitude (°)	40.010088	40.010080	40.010075	40.010072	40.010068	40.010062	40.010054	40.010049	40.010048	40.010048	40.010046	40.010047	40.010048	40.010051	40.010057	40.010059	40.010062	40.010068	40.010074	40.010077	40.010077	40.010077	40.010076	40.010073	40.010069	40.010070	40.010075	40.010080	40.010082	40.010082	40.010081	40.010080	40.010077	40.010072	40.010066	40.010062	40.010064	40.010068	40.010071	40.010073
E.Offset (US ft)	-413.78	-428.49	-437.81	-444.17	-448.76	-451.61	-452.50	-453.40	-453.05	-451.33	-449.83	-449.16	-449.22	-449.12	-449.12	-449.36	-449.34	-449.78	-450.92	-451.36	-450.91	-450.22	-449.38	-448.35	-447.25	-445.67	-443.59	-441.66	-439.98	-438.35	-436.77	-435.37	-434.08	-432.87	-431.41	-431.27	-433.64	-436.78	-439.69	-442.20
N.Offset (US ft)	45.69	42.55	40.73	39.67	38.38	36.17	33.03	31.16	31.01	30.96	30.27	30.46	31.04	32.21	34.15	34.84	35.94	38.39	40.52	41.40	41.69	41.63	41.14	40.14	38.73	38.80	40.91	42.63	43.17	43.28	43.08	42.48	41.37	39.78	37.65	36.08	36.72	38.42	39.50	40.01
TVD (US ft)	2965.36	3090.46	3184.98	3278.75	3372.63	3466.55	3561.50	3655.47	3750.47	3844.45	3938.44	4033.43	4128.43	4222.41	4317.39	4411.39	4505.38	4600.35	4695.32	4789.31	4884.31	4978.31	5073.30	5167.29	5261.27	5356.25	5450.21	5545.17	5639.15	5733.14	5828.13	5922.11	6017.10	6111.08	6206.04	6300.02	6394.99	6488.92	6583.87	6677.83
Az (°)	259.99	255.75	263.12	256.00	252.62	200.00	191.75	244.82	82.26	102.12	126.79	356.55	187.74	5.50	347.54	315.22	7.29	338.87	319.15	33.74	76.37	109.25	127.87	137.87	146.12	51.12	39.37	63.75	81.81	90.62	104.37	121.87	137.87	147.00	144.37	243.37	302.00	294.39	285.37	276.87
Inc (°)	7.22	6.50	5.00	2.88	2.94	1.94	2.00	0.77	1.13	1.00	1.07	0.88	0.19	1.63	0.73	0.19	1.21	1.88	1.08	0.31	0.38	0.50	0.69	1.06	1.13	1.63	2.00	1.19	66.0	1.00	0.94	0.94	1.13	1.31	1.81	1.00	2.31	2.06	1.69	1.44
ME (US ft)	3001.00	3127.00	3222.00	3316.00	3410.00	3504.00	3599.00	3693.00	3788.00	3882.00	3976.00	4071.00	4166.00	4260.00	4355.00	4449.00	4543.00	4638.00	4733.00	4827.00	4922.00	5016.00	5111.00	5205.00	5299.00	5394.00	5488.00	5583.00	5677.00	5771.00	5866.00	5960.00	6055.00	6149.00	6244.00	6338.00	6433.00	6527.00	6622.00	6716.00

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5D Survey Report

	Comment																										LAST WFT MWD SURVEY	PROJECTION TC
	VS (US ft)	447.75	448.91	449.81	450.46	451.07	451./1	452.23	451.76	449.85	447.44	444.82	441.96	439.01	437.19	437.60	439.00	439.91	440.27	440.36	440.30	440.09	439.85	439.50	438.96	437.19	433.70	432.87
	CL (US ft)	94.00	95.00	94.00	95.00	94.00	95.00	94.00	94.00	95.00	94.00	95.00	94.00	95.00	94.00	95.00	94.00	95.00	94.00	95.00	94.00	94.00	95.00	94.00	95.00	189.00	238.00	50.00
	DLS (*/100 US ft)	1.74	0.29	0.35	0.10	0.08	0.37	1.10	1.20	1.25	0.47	0.58	0.25	0.18	1.63	1.54	0.24	0.55	0.37	0.07	0.19	0.14	0.04	0.19	0.11	0.31	60.0	00.0
	Longitude (°)	-109.478651	-109.478654	-109.478657	-109.478659	-109.478660	-109.478662	-109.478664	-109.478661	-109.478654	-109.478645	-109.478635	-109.478625	-109.478615	-109,478608	-109.478610	-109.478615	-109.478619	-109.478621	-109.478622	-109.478622	-109.478622	-109.478622	-109.478621	-109.478620	-109.478615	-109.478605	-109,478603
	Latitude (°)	40.010077	40.010083	40.010088	40.010093	40.010097	40.010101	40.010106	40.010114	40.010120	40.010123	40.010124	40.010123	40.010121	40.010119	40.010116	40.010113	40.010110	40.010105	40.010099	40.010094	40.010088	40.010083	40.010077	40.010071	40.010057	40.010036	40.010032
	E.Offset (US ft)	-445.85	-446.81	-447.55	-448.07	-448.54	-449.06	-449.43	-448.70	-446.59	-444.09	-441.44	-438.60	-435.69	-433.93	-434.44	-435.93	-436.95	-437.46	-437.73	-437.84	-437.79	-437.73	-437.55	-437.19	-435.85	-432.99	-432.30
	N.Offset (US ft)	41.41	43.73	45.58	47.21	48.84	50.25	52.19	55.11	57.36	58.35	58.56	58.17	57.72	56.82	55.64	54.73	53.43	51.63	49.58	47.64	45.69	43.62	41.58	39.45	34.30	26.75	25.15
Drill Floor )	TVD (US ft)	6866.78	6961.75	7055.73	7150.71	7244.70	7339.69	7433.67	7527.62	7622.56	7716.52	7811.49	7905.44	8000.40	8094.37	8189.36	8283.35	8378.33	8472.31	8567.29	8661.27	8755.25	8850.23	8944.21	9039.18	9228.11	9465.97	9515.94
centre, TVD relative to Drill Floor	A7 (°)	338.23	336.62	340.37	344.37	343.66	333.75	356.25	27.87	61.87	75.62	94.50	101.12	96.12	156.62	243.24	233.25	204.00	189.00	186.12	179.87	177.37	179.12	170.75	170.40	161.84	156.75	156.75
	Inc (°)	1.65	1.38	1.06	1.00	1.07	0.75	1.69	2.13	1.75	1.56	1.69	1.81	1.75	1.00	1.13	1.00	1.06	1.24	1.25	1.13	1.25	1.25	1.25	1.35	1.89	2.00	2.00
Survey Points (Relative to	MD (US ft)	6905.00	7000.00	7094.00	7189.00	7283.00	7378.00	7472.00	7566.00	7661.00	7755.00	7850.00	7944.00	8039.00	8133.00	8228.00	8322.00	8417.00	8511.00	8606.00	8700.00	8794.00	00.6888	8983.00	9078.00	9267.00	9505.00	9555.00

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